The Builder.

VOL. XIV.—No. 697.

NEXT week (Tuesday, the 17th), a meeting of several architectural societies will be held at St. Alban's, when Mr. Scott will give a walking commentary on the Abbey, and its proposed restorations; and Mr. Poole, of the Northampton Society, will deliver a lecture on architectural colouring. It is hoped that the gathering together of many persons interested in our ancient architectural glories will give a stimulus to the proposal for restoring the Abbey Church, the subscriptions to which continue to flow in from many and distant sources. It will be remembered that a meeting was held in April last, "to consider the best means of restoring and upholding the Abbey Church of St. Alban's, and of obtaining for it the dignity of a cathedral," when a report from Mr. Scott was read, and a large sum of money, now increased to nearly 8,000*l.* was subscribed. The sum required to render the building fit for cathedral uses is about 12,000*l.* and for works which, on the ground of consistency, should follow, about 5,000*l.* more. The historical interest attaching to St. Alban's Abbey Church makes its maintenance an object of national concern, and, remembering the sum of money that was subscribed in a short time when York Cathedral was partly destroyed, and that when, more recently, Doncaster Church was burnt, 30,000*l.* were subscribed in a few days towards rebuilding it, we feel little doubt as to the success of the movement in favour of St. Alban's. Its claims are great.

"Founded," as the Report says,—"in the days of Constantine the Great, in honour of England's first martyr, and within ten years of his martyrdom, it is probably the earliest in its authenticated foundation of any church now existing in Britain; and possibly the only instance of a church clearly proved to be the lineal successor of one of those built on the very first establishment of Christianity in our country; for we are informed that, the church first erected being small, the Pagan Saxons disdained to destroy it according to their usual practice; so that it survived the second period of idolatry, and was standing when the Saxons themselves embraced Christianity. Bede distinctly says that this Romano-British Church of St. Alban remained in his days; and a century later the body of the martyr, which had been removed during the Saxon invasion, was restored to the ancient church by Offa, king of Mercia, and an abbey founded in connection with it."

Whether King Offa rebuilt the church itself is uncertain; but, from some fragments of evidently Saxon date, it would appear probable that it was rebuilt either then or shortly afterwards.

The two last Saxon abbots collected vast stores of materials from the ruins of Verulam for the rebuilding of their church, a work carried into execution by the two first Norman abbots, on a scale so gigantic as even now to astonish the beholder. The nave, or western arm of the cross, alone measured internally no less than 270 feet in length, and the total length of the church appears to have been as much as 450 feet. It had no less than six apsidal chapels, besides the great apse containing the high altar and the shrine of St. Alban; and its dignity externally was enhanced by three towers; one at the intersection of the cross, and two in the western façade. The whole edifice, in its perfect and unaltered state, must have been dignified and noble in the highest degree; though (being built entirely of Roman brick, and covered both within and without with an incrustation of plaster) its beauty was the result of outline, proportion, and vastness, rather than of architectural detail: the stern severity of its interior was, however, relieved by costly accessories, and by the enrichment of every part of its surface with painted decorations, of which remains may still be traced, wherever the early surfaces remain. The painting is usually of a very simple character: the plastered surface is divided into the forms of stonework, by thick red or murry-coloured lines; some single, others double. In the arches the voussoirs thus represented are sometimes of alternated colours, and the soffites of the arches painted in some simple geometrical pattern, varying in each arch. In other parts the decorations were much more rich; consisting of bands of Norman foliage of much beauty, with figures and animals.

We have on several previous occasions given particulars of the building, both descriptive and pictorial, and in our present issue we add some farther illustrations,* The building is full of story:—

> "Where'er we move, or cast the thoughtful eye,
> Some memory starts, some form is sweeping by;"—

and beyond this it is a perfect study of the architecture of the middle ages. To adopt the words of the report,—

"Not to dwell upon the fact that its walls are composed of materials from ancient Roman structures (probably including also those of the church erected under Constantine), and that several architectural fragments remain of undoubted Saxon date,—we have in the building, first, a specimen on a vast scale of the earliest Norman architecture forming the great bulk of the building, including also the great central tower: we have, secondly, an extremely beautiful specimen of the later and more enriched Norman, in the passage or "slype" at the extremity of the southern transept: thirdly, we have, in the incipient works in the west front, including probably the three beautiful western porches, works of the earliest Pointed Architecture, executed in the days of King John; and in conjunction with these, and on either side of the nave, we have a majestic specimen of the same style in its future developement, executed early in the reign of Henry I.: fourthly, we have in the choir a highly finished work of the end of the same reign,—evincing the rapid developement and refinement of the art at that period; and adjoining this, in the half-ruined eastern aisle, is a truly exquisite specimen of the same style slightly more advanced, and probably executed in the time of King Edward I. In the nave again, in the eastern half of the south side, we have a most noble and magnificent specimen belonging probably to the close of the same reign; and in the exquisite Lady Chapel, we have the middle pointed or decorated style in its fullest developement; while, lastly, in the monumental chapels of Abbots Wheathampstead and Ramridge, and of Humphrey, duke of Gloucester, and in the magnificent altar-screen—rivalling and closely resembling that at Winchester—we have splendid specimens of the closing period of Gothic architecture; and, unfortunately, in many insertions into the older work, we see numerous instances of the decline which preceded its final extinction."

It is doubtful if a more complete series can be found elsewhere. The Norman passage, or "slype," referred to above, is the subject of one of our present illustrations.† This adjoins the end of the south transept, and was the passage to the chapter-house built by Robert de Gorham, who was bishop from 1151 to 1166. It is almost the only remaining portion of the abbey buildings, and is more elaborate in design than any similar passage-way that we remember. It is arched over in a plain, semi-circular form, with brick, springing from a cornice, beneath which the side walls are faced with an arcade of intersected Norman arches, thickly set with moulded bands, reel-shaped, and enriched with variously sculptured capitals, some of which we have shown more at large. A doorway at each end has been walled up, and a side opening pierced into the transept. The clear dimensions of the passage, according to Messrs. Buckler's "History," are 29 feet 6 inches in length, by 9 feet 11 inches in width.

Our other illustration (over leaf) represents the Watching Chamber on the north side of the Saint's Chapel, wherein a monk was posted as a guard of honour to the shrine.

On the frieze of the structure is a series of carvings, now much mutilated, representing the memorable events of Alban's history, and other singular subjects. Beneath are almeries or lockers, in which the reliquaries and the sacred vestments were deposited.

Some idea of the use made of the sacred edifice during the civil wars of the seventeenth century may be formed from an inscription, effected probably by the point of a knife, and now almost obliterated, on the south side of the north doorway in the screen: "Hugh Lewis souldier in his Ma^ties^ Army taken prisoner at Ravensfield Northampton scr y^e^ . . . . . day June 1645." This part of the abbey church has long been used as the spiritual court in which visitations are held, and is designated the presbytery.

This large mass of woodwork, of about the time of Henry VI. entirely occupies the whole of one of the Early English arches on the north side, immediately behind the great altar. In some parts the more ancient work has been cut away, and in others filled up with plaster, in order to make this more modern structure fit properly in its place. In the foreground of the engraving some steps are shown, which lead to the small vault, containing the remains of the "good" Duke Humphrey, brother of Henry V. who was murdered at Bury, and afterwards brought for interment close to the shrine of St. Alban: the skull and some other portions of the body are still visible in a leaden coffin, which has been partly cased recently with wood. It has been since found necessary to place an iron grating in front of the vault, to preserve the bones of the "famous statesman and encourager of learning" from being pilfered from their resting-place. A curious painting of the Crucifixion is visible on the wall of the vault.

The oblong space just beyond the entrance of the vault—which is, by the way, the only underground part of the abbey—is the site of the shrine of St. Alban. This end of the abbey has evidently been painted: where the whitewash has been removed, the colours are found wonderfully perfect. A kind of madder crimson, which forms part of the decoration, is remarkable for its brilliancy.

Attempts have been made at various times to save this fine old abbey church from ruin. James I. was so greatly struck with the beauty of the edifice, and the disgrace attached to the country by the dilapidated state in which he found it, that he issued a royal brief for a collection to be made throughout the kingdom for the purpose of raising funds for repairing it. In 1680 a similar course was adopted by Charles II. and afterwards by George II. But on these occasions only temporary repairs were attempted, and nothing of any importance was done until the year 1833, when further subscriptions were entered into, and the abbey, in part, put into a comparatively good state of repair.

* See vol. xiii. p. 217, for an account of a visit to St. Alban's, with a plan and other illustrations; also vol. v. p. 543. In vol. vii. p. 582, will be found a view of the mutilated altar-screen.

† See p. 331.

ST. ALBAN'S ABBEY CHURCH: THE WATCHING LOFT, IN THE SAINT'S CHAPEL.

It is, however, distressing to witness the condition now of certain portions of the building, and that, too, notwithstanding the constant care and well-directed exertions of Dr. Nicholson, the rector. In part of the nave the thick coatings of whitewash have been scraped off, and the sharp and beautiful work of the rich ornamentation is made visible. Most of the oak doors and presses are undergoing a thorough cleansing. Fragments of shrines and ornaments have been collected, and carefully stored in niches, ready to be put into their proper places when required; and we may hope that it will not be long before they will be required, and that this gigantic monument of ancient piety and skill, this record of a thousand years, will be made fit for its holy purpose, and preserved for the contemplation of coming generations. Those

> "Whose souls the magic Present hath not bound;
> Who live to think, and dare to gaze around;
> Who fain would read man's history, hopes, and fears,
> Writ on the dark remains of vanished years,
> Can beauty see in forms laid waste and low,
> And o'er Art's past creations burn and glow,"—

will reap a large harvest of enjoyment from a visit to St. Alban's.

A FOREIGN WRITER'S REVIEW OF THE LILLE COMPETITION.

THE following is a translation of an article in a Paris journal from the pen of Henry Cauvain, which, as giving an account to the French people of the "concursus" lately held at Lille, will gratify many of our readers. The English architects will be glad to see the unbiassed criticism of an intelligent foreign writer on a subject to all of great interest.

An event has just taken place at Lille which, in more respects than one, is of great interest, and, as such, merits attention. We allude to the concursus opened in that city to the architects of every country, for the erection of a cathedral, under the title of "Our Lady of the Vine Arbour and St. Peter" ("Notre Dame de la Treille et de Saint-Pierre"), and to the extraordinary and unexpected results, which are in themselves very curious, and which have been brought to light by this solemn trial.

We shall here, at the beginning, be permitted to call attention to a fact which may perhaps at this moment have attracted notice from one end of France to the other: it is, that in proportion to the development of the wealth of a country, so also is awakened the love of the fine arts in every direction. Our civilization, although it has allowed a large scope to industry, has not by any means relinquished the cultivation of intellectual matters. Our towns are every day changing; and greater care than before is taken of the public health by the adoption of proper means for its preservation; while, at the same time, monuments of a civil and religious kind spring up, and statues are dedicated to our great men as well as to other men of worth. Paris is naturally at the head of this movement: it is not necessary for us to dwell on the wonderful works which are there accomplished,—especially those of the last five years, under the auspices of a prince who seems to have adopted the device applied by Augustus to Rome, "I found it built of bricks and I leave it of marble." The example set by the capital is followed and emulated by the whole country. At the two extremities of the empire, two cities, both remarkable for the commercial tastes of their inhabitants, and both having for a long time been deprived of the monuments of art, although the first was, in the early ages, the cradle of Grecian civilization in Gaul,—and although the second had received from the generosity of the Middle Ages many admirable edifices, since destroyed by the hand of man,—Marseilles and Lille are deserving of being specially mentioned. Each of these two cities is now labouring to effect the greatest enterprise that can be entrusted to architecture, namely, a cathedral; that is, the monument which is always to be considered as the loftiest expression of human art under the inspiration of the Divine Intelligence. Each of those cities has chosen a style for itself. For the cathedral at Marseilles the preference has been given to the Byzantine style; and its cupolas, resembling those of St. Mark, at Venice, will be observed by the eyes of the approaching sailors from a distance, brilliant from being gilt, in the azure sky. For the cathedral of Lille, the Ogival style has been selected, and its light spires and its hardy little columns will be well delineated in the frequently murky air of its northern climate. It is not possible to refuse every praise to these intellectual selections,—to the Oriental architecture, with its majestic profiles and its radiant ornamentation, on the shores of the Mediterranean; and, on the Flemish soil, to the Gothic architecture, with its thoughtful inspirations and its mystical splendour.

This Gothic monument at Lille has, from the circumstances attendant on its origin, assumed a character altogether special. From time immemorial, the town of Lille has been placed under the patronage of Notre Dame de la Treille. Although it may be difficult, if not almost impossible, to say whence this odd name has been taken for the patronage of a town in a country where the grape scarcely ripens;—it is certain that, within a very short time after the city was founded, the traces of the respect shown to Notre Dame de la Treille prove the fact of the worship. A miraculous image of that holy patroness was placed in the collegiate church of Saint Peter, formerly a magnificent edifice, erected by the piety of the first counts of Flanders, on the ruins of a Roman monument. A solemn procession was founded by the

piety of the Countess Margaret of Flanders; and the result was seen in the enormous multitudes which always flocked to join in it. All these traditions, which were in themselves so worthy of respect, were shattered into fragments by the Revolution. The collegiate church of St. Peter—the finest ornament of the city—was thrown down by the strokes of the hammer, when the adherents of the goddess Reason cared but little for an edifice built by Christians in the thirteenth century. The tombs of Louis de Male and of his successors, although then considered to be exquisite *chefs-d'œuvre*, were broken to pieces, and sold at the price of copper. The zeal of one pious man secured the preservation of the image of Notre Dame de la Treille, for which he found an asylum, until better times, in one of the chapels of St. Catherine's Church, which was previously known as being possessed of one of Ruben's grand pictures, the magnificent gift of two private citizens of the sixteenth century, Jean de Seur, and his wife Mary Paltin; by which means, at that time, two modest parishioners showed their veneration for their church.

During a solemn jubilee, two years ago, the banner of Notre Dame de la Treille was raised at Lille. On many occasions we have embraced the opportunity of establishing facts, which prove that amongst us of this age the strong faith of our ancestors is again awakened. The railing incredulity of the eighteenth century, the hatred and fury of the revolutionary period, have become for us anachronisms: on every side we see revived, with devotional eagerness, the recollections of ancient France, which is thereby for the present reconciled to modern France. The chain of our country's traditions is renewed, never, it is to be hoped, to be again broken. The festival at Lille, which from its *éclat* and its magnificence will long live in the memory of our contemporaries, was one of the happy symptoms of this powerful renewal in the bosom of our present civilization of the ideas, of the manners, and of the customs of former times.

It was in the midst of the rejoicings of this solemnity, that, as it were by the spontaneous emotion of the inhabitants, the thought dawned suddenly upon them of building a magnificent temple in honour of Notre Dame de la Treille. The proposal was hailed with delight; and it has already borne fruit: men of devotedness and enthusiasm have easily been found to carry it into full operation. Yet how much soever the merit of the organisation is due to the last-named, it undoubtedly is a very significant fact that the resolution emanated from the will of the entire city, in the midst of the attractions of public enjoyment; and that this inspiration of universal suffrage was, so to say, a vote for founding a cathedral. At this period, when the regular action of the administration has taken the place of every popular movement, there is in this fact something to remind us of the epochs of sincere and decided faith, when the marvellous creation occurred of such numbers of religious edifices, under the decree, in some measure of the fervid zeal, of the people.

It was decided that a concursus should be opened to the architects of every country. Prizes of considerable value, and gold and silver medals, were voted to stimulate the zeal of the candidates. Very recently we gave great praise (in reference to the premium offered by M. Veron) to the forms of a concursus for the encouragement of literature; but, perhaps, in questions of art, the plan of a concursus is of far greater utility. All the efforts of literary men obtain with ease the honours of publicity. The public press, the reviews, the booksellers, put the works of thought into circulation, and the names of the authors soon become known. But such cannot be the fate of the works of art, and especially of drawing—and above all, of architecture. In their case, the artists have to labour in solitude,—a thankless task, which keeps them during the dull hours of night in their studios, or their workshops. How many architects of great merit are there who, after they, in their reveries, had made plans for building palaces, were never able to build any thing more than pigeon-houses. The concursus serves to bring from their hiding-places men of knowledge and of study, with their plans ready in their hands; and then they become known by the light they create and diffuse around them. Then are they enabled to reveal their talents, to exhibit their labours, and to draw inspirations from the works of others. In times of yore, antiquity committed no mistake in such matters. It was by means of the concursus that the great architects and the great sculptors of Athens conquered and won their reputations. Phidias and Praxiteles, in the same way as Eschylus and Aristophanes, were indebted to the concursus for their most brilliant triumphs and their most splendid crowns. In modern times, the concursus, every time it has been employed, produced the best results. On this occasion we shall bring to mind but one concursus, and that is the one held at Florence, and which produced for that city the gates of the Baptistery, those gates which, according to the expression of Michelangelo, were fit to be the gates of Paradise. At this memorable contest, which forms a luminous epoch in the history of the art, a young man twenty-four years of age had the glory of carrying off the prize from artists of genius, as were Brunelleschi and Donatello, who themselves hastened to admit their being vanquished, and to decree that the palm should be given to their fortunate rival Lorenzo Ghiberti.

The city of Lille is therefore to be congratulated for having adopted the plan of a concursus. We shall now add that it was well done to open the competition to foreign architects. We know that against this proposal very strong protests were made. The concursus at Lille ought, it was contended, to have been kept sacred for French architects alone: the work was a French one, and French hands alone ought to begin and end it. We have even been assured that the resolution adopted by the Lille committee had given umbrage to a certain number of French architects, who, therefore, of their own accord abstained from interfering. Yet we cannot, without some pain, admit this fact to be exact. If it really be the case, those who abstained and withdrew from the contest must now regret their having done so, since they thereby contributed to give the vantage-ground to foreign rivals.

As for us, we heartily approve of the mode adopted at Lille, which, by inviting to the contest the architects of every country, has performed an act truly *catholic* in the real sense of the word, so that the presence of England, of Germany, of Belgium, at this peaceful battle, has shown what was the state of the art in these different countries. If the result of the contest has, contrary to general expectation, given the superiority to foreign architects, a powerful motive of emulation will be found therein to excite our artists to exert themselves, so that they may soon regain the ground lost. In France the artists, like the soldiers, do not see in a defeat anything more than a signal for fresh exertions, and as giving an opportunity for a glorious revenge.

Be that as it may, the concursus at Lille was most brilliant. There were forty-one competitors. Of this number, fifteen belonged to France, fourteen to England, and one to Scotland: Rhenish Prussia sent three; the Grand Duchy of Baden, two; Austria, one; Hanover, one; and Silesia, one; making in all eight for Germany. Holland, the Grand Duchy of Luxemburg, and Belgium, were represented each by a project. It is now seen that, in the number of competitors, France and England were equal and completely rivals, the contest between whom was hot and warmly discussed. Various devices, according to usage, concealed the names of the combatants. The jury for examining presented in the fullest degree all the guarantees that could be desired as to enlightenment and impartiality.

The models and plans of the forty-one competitors were all placed in order in a vast locality admirably appropriated for the purpose; for, in reality, very spacious halls were required to contain them all. In fact, besides the plans which were to serve in showing the projected edifice, in its general aspect, in the different sections, and in the details of its construction, the candidates were required to give satisfaction as to the complete ornamentation of the monument, and as to its suitable religious furniture. The programme required unity of style in the edifice, in the ornaments, and in the necessary furniture. A very wide field was thereby opened to all the competitors. A cathedral of the thirteenth century, with its chapiters, with its rosaces, with its verreries, with its portals, with its altars, with its episcopal seats, with its baptismal fonts,—is nothing less than a poem in completeness. To attempt such an enterprise, the imagination and the judgment must agree; science and creative talent must accord. A thorough, profound, and familiar knowledge of Christian symbolism is necessary. The furniture in a special manner demands all the erudition of a Benedictine professor, in union with the exquisite taste of the artist. In fact, if our Middle Age cathedrals were still standing, they might serve as starting-points for modern architects; but the moveable matters of furniture have in almost all places perished, being in this spot destroyed by the iconoclasts, and in that one being displaced by the selection of made-up articles. Thus, then, among the churches of the Middle Ages, some are naked and desolate,—the hands of the Vandals have been felt in these edifices,—while those others are encumbered with inconsistent objects and ridiculous ornaments, where the bad taste of the last century has effected an invasion. Men of intelligence, who understand what is to be restored, can alone reinstate them in their ancient splendour and their primitive unity.

In this point of view, the concursus at Lille presented very high interest. The throng of public spectators, previous to the enlightened appreciation of the examination jury, was a recompense for the exertions of the candidates. The projects as exhibited,—almost all, deep, skilful, and conscientious studies of the subject—one-half, at least, raised themselves above the ordinary level by the manifestation of real talent: seven or eight were worthy of the very highest praise. Amongst the last-mentioned, principally were to be distinguished, in connection with the work of erudition indispensable in the circumstances, the striking characteristics of invention and originality. But the cleverest imitation work is still but an imitation; and if a work of art is dragged along the beaten pathways of imitation, it from necessity is of the middle rank; it does not possess the qualities of life, for the generous blood of spontaneous and free inspiration ought to be felt beating in its veins.

At the Lille concursus there was found, in at least a certain number of the projects, the complete fulfilment of all these essential conditions. Three of these projects were placed by the jury in the first rank, and were remarkable amongst all for the power of their conception, as well as for the profoundness of archæological knowledge displayed in them.

It is already well known that the committee, in drawing up the programme, had imposed on the candidates a style and an epoch. The Cathedral of Notre Dame de la Treille was required to be of the Ogival style, in the system of the thirteenth century. This selection deserves the highest approbation. We do not thereby maintain that the Gothic is the only Christian art, as some persons suppose: on the contrary, we hold that the spirit of Christianism is by no means emprisoned in one sacramental form: we find it equally strong, equally brilliant, in the magnificent encirclement of the Basilicas, under the arches of the Roman churches, and under the imposing dome of St. Peter's, at Rome. The sentiment of religion does not dwell exclusively in the cathedrals of the Middle Ages: it is residing at St. Mary's de Transtevere, in the Cathedral of Pisa, in Notre Dame la Grande at Poitiers, as well as in the churches of Notre Dame at Chartres and at Rheims. It is not right to be more exclusive in the domain of ancient art than in the domain of sacred literature and of pulpit eloquence. However admirable may be the commanding position of St. Thomas of Aquinas, and St. Bernard, no one could, without injustice, sacrifice to them St. Augustin and St. John Chrysostome, Fenelon, and Bossuet. That the art of Pierre de Montereau and of Robert de Luzarche is profoundly catholic we all frankly admit; but that is not a reason for our slighting with disdain Michelangelo, Bramante, and Palladio.

We, moreover, with perfect goodwill, acknowledge, that after taking all things into consideration, as well with reference to the climate as to the traditions and the local conditions of the site, the choice of the Ogival style was the preferable one for the Cathedral of Lille, where it is to be erected on an eminence, which sustains the Chateau du Buc, which formed the cradle of the Flemish city at the dawn of the Middle Ages. It is destined to console the city for the loss of the collegiate Church of St. Peter, which was erected at the time when Philippe-Auguste reigned; and also for the loss of the Church of St. Stephen, a magnificent Gothic monument, which was ruined by the Austrian shells during the siege of 1792. Such were the reasons that produced the adoption of the Ogival style. The choice being once made, it was quite natural for those who fixed it to fix also their attention to the thirteenth century, which is the heroic age of this kind of architecture. The Sainte Chapelle of Paris, erected in three years, by Saint Louis, and offering also all the characteristics of unity of inspiration, is, in our eyes, the Parthenon of the Gothic art.

It now remains for us to make known the results of the concursus at Lille.* * *

On summing up, we find that England obtained two prizes, the first and second,—three silver medals and three honourable mentions, being in all eight nominations on fourteen candidates. France obtained one prize, the third,—one gold medal, one silver medal, and one honourable mention, that is to say, four nominations on fifteen candidates. Germany obtained four nominations; while Belgium, Switzerland, and the Grand Duchy of Luxemburg, bore away one nomination each.

The result is, at the first glance, enough to surprise us. France, in all matters of art, has exercised such an incontestable supremacy, as the fact was proved so splendidly during the Universal Exhibition of 1855, that this victory of England, on the ground of religious architecture, has in itself something altogether unexpected. Besides, it is rather singular, we must admit, that a Catholic country such as France is, should yield the palm, at a solemn concursus, to a Protestant country, and that, too, for the object of creating a cathedral. We have, also, to add a circumstance, which gives greater *éclat* to the triumph borne off by the two first prizes: it is the admitted and consummate merit of the architects who took the first prize. The clever restorer of the Sainte-Chapelle, the author of the Church Saint-Nicholas at Nantes, and of the Church of Belleville, was, it must be allowed, a formidable competitor. The projects which have been crowned must have contained within them very high qualities of science, of invention, of style, and of taste, to gain the precedency over their learned and ingenious rival.

But if the result of the concursus has disappointed the general expectation, it will not appear so extraordinary to observers who have, with due attention and with eyes of careful experience, noticed the movement of mind on the other side of the Straits of Dover. There, in proportion as the prejudices of Protestantism grow weaker, a school of art has been formed and augmented. By little and little the liking has gone down for the uncouth architecture of columns, which has infested London and England with so many awkward and clumsy buildings; and the new school swears, by the climate of Great Britain, that it will, with predilection, with ardour, study the forms of the national architecture during the Middle Ages. This impulse being once given, the current of ideas has been rapid, resolute, and irresistible; and therein is to be found another evident proof of the positive and vigorous character of the English people. Scientific associations have been established in the principal towns under the name of Ecclesiological Societies; and in their treasuries money, as well as reason, abounds. Men of talent are largely remunerated: great publications have been undertaken and brought to perfection. Under the fertilizing influence of such encouragement, numbers of religious edifices have been erected; and all have seen rising up on the banks of the Thames, as a testimonial of the living power and force of the renovating movement, the prodigious monument, the Houses of Parliament, having an appearance fairy-like, and at the same time grand in the extreme, if indeed a strict and severe taste did not therein find more than one imperfection.

However slight may be the study applied to this monument, in the exterior as well as in the interior, and also after even a cursory glance at the works recently published in England, one cannot but be struck with the enthusiasm of imagination, the fertility of thought, and the vivifying energy exhibited by the English architects. One cannot be long examining their acts without discovering another source of merit, and which, perhaps, is, in itself, of high value;—that is the talent of appropriating the most remarkable things. In France, it is generally admitted, although there may be some exceptions, that the architects take but little trouble with anything but the façades and the staircases. Provided they succeed in these two points,—and God knows, it is not always that they succeed in them,—they take but little pains with the other parts. People are then lodged as well as they can be, in the newly fitted-up cage, brilliantly decorated on the exterior, but as incommodious as can be in the interior. You may visit the greater part of our modern edifices, and you will find that this observation is quite correct. In England the rule is to consider, beforehand, what the building is intended for: care is then taken that all the parts should contribute to the necessities for which it is required; and all kinds of ingenious plans are brought into play, in order that it may have not only a fine appearance, but be also a comfortable dwelling-house. The architects, thanks to their conscientious preparations, do not perpetrate those cruel blunders which can be pointed out by thousands in the productions of modern art, as well in Paris as in the country.

Such were the distinguishing qualities shown at Lille in the projects that emanated from the English artists, that the Examination Jury declared them worthy of being publicly rewarded. The object was to build a vast church fitted to the fulfilment of all the conditions of the Episcopal office (for Lille cherishes the ambition of installing hereafter a bishop in it) with three naves, a transept, absidal chapels around the sanctuary, a crypt under the choir, and at the entrance, two chapels—for the dead and for the baptismal fonts. Besides all these, it was necessary to produce sketches for the internal arrangement. This extensive programme has afforded a complete triumph to the schools of England, which have, during the last twenty years, dedicated especial attention to the nearly exclusive study of the Ogival art.

We do not, nevertheless, look upon this result as in any respect alarming for art in France. To men of judgment and of talent, such as our architects, a defeat like this is but a notice, and nothing more. The concursus at Lille tells them that a competition worthy of their emulation has arisen in England. That is enough to stimulate their zeal and spur them forward to emulate their rivals. On the first opportunity, we are convinced that they will efface the recollections of the defeat, by a brilliant victory. Sophocles himself was not always the victor in the combats of literature.

* This we have already done.

ON THE BRIDGES AND VIADUCTS OF THE PRESENT DAY.*

THERE are few public works (commercially speaking at least) of greater interest or importance than bridges and viaducts. The necessity of good roads of communication from one part of a country to another, and the impossibility of completing them without erecting bridges over streams and viaducts over valleys, have given rise not only to the works of the present day, but also to those stupendous monuments of antiquity which have been handed down to us. With the magnificent bridges, viaducts, and aqueducts of the Romans every architect must be well acquainted, and it is indeed not long since that ancient Roman roads and modern British railways were compared by a very able authority before the Institute. In consequence of the immense extension of the railway system during the past thirty years, a more extensive field of bridge building has been opened than at any previous period. The fact that in 1852 fifteen thousand miles of railway had been constructed in Great Britain alone, and that these required, on an average, three or four bridges per mile, will give a total of fifty thousand bridges, large and small.

In speaking of the bridges and the viaducts of the present day, it will be hardly necessary to observe that their great and striking peculiarity is to be found in the use of iron; and though, as architects, we may be impressed with the superior dignity and proportions of stone bridges, it must be granted that iron has many advantages compared with either stone or timber, as it is much lighter and more economical in the first outlay than the former, and more durable than the latter. It must not, however, be forgotten that, although iron construction may be considered the great invention and distinguishing peculiarity of modern times, there are also some very fine works in stone, brick, and timber. In the two former, however, no progress worthy of peculiar notice has been made, bridges of larger span having been executed by the Romans centuries ago. The largest span in stone executed in England is that over the Dee of 200 feet; but ancient examples are recorded to have been from 50 to 100 feet wider, which, with reference to the age when they were executed, must have called for a comparatively greater amount of skill. It is in iron, therefore, with respect to the span, that the great merit of modern works consist: the changes in the different modes of applying this material have been gradual and progressive, and very similar to, though somewhat more rapid than, the changes in the different styles of architecture. The first iron bridge was erected about sixty years ago, and partook of the character of its predecessors in stone, being formed of cast iron voussoirs, or wedge-shaped blocks put together in ribs. From that time to the present there has not been much improvement in the construction of this class of iron bridges, and the span has only increased from 200 to 240 feet, which would appear to be the proper limit. Soon after the introduction of the cast voussoir principle, cast-iron beams were used for small spans of 50 feet, which eventually, by combination with wrought-iron trussing, reached as far as 100 feet. The greatest improvement was the formation of girders entirely of wrought-iron, which soon followed the production of rolled plates and bars of different forms and sections. This in a few years led to the execution of spans of 460 feet,—the largest of rigid roadways with a level headway beneath, yet constructed. In suspension bridges, spans on this principle have been executed of upwards of 1,000 feet. But as these, from their vibration, are quite unfit for the passage of heavy weights in rapid motion, they will not be treated of on the present occasion.

Cast-iron bridges may be classed as follows: the Arched Rib, the Trabeated, and the Combination Girder. Wrought-iron bridges consist of the Tubular Girder, the Tubular Bow Girder, the Large Tube, and Lattice Girders, with several varieties of combination.

The first iron bridge constructed in England is that over the river Severn, near to Colebrook Dale. The design appears to have originated with Mr. Pritchard, architect, about the year 1773, and the works were completed in 1779. In this bridge five arched ribs of cast-iron support perpendicular spandril pieces, which carry the roadway. The ribs are nearly semicircular, and have a span of 100 feet.

Sunderland Bridge, over the river Wear, the next cast-iron bridge erected, was designed by Mr. Rowland Burdon, in 1792, to whom a patent was also granted, for "a certain mode or manner of making, uniting, and applying cast-iron blocks to be substituted in lieu of keystones in the construction of arches." This bridge consists of six arched ribs of a segmental form, 200 feet span and 30 feet rise. Each rib is 5 feet deep, and consists of 105 separate blocks.

Buildwas Bridge, over the river Severn, by Telford, is like the foregoing,—a single arch, 130 feet span, with 27 feet rise. It consists of three arched ribs, 3 feet 10 inches deep.

* Read by Mr. John Clayton, Associate, at the ordinary general meeting of the Royal Institute of British Architects, May 19th.

Boston Bridge, by Rennie, is remarkable for the slightness of its rise, which is 4 feet, with a span of 100 feet.

Southwark Bridge, also by Rennie, has the greatest span executed, that of the centre arch being 240 feet, and of the sides 210 feet. The rise of the centre arch is 24 feet, that of the side arches proportionate. The arches consist each of eight ribs, 8 feet deep at the springing, and 6 feet at the crown. Each rib is in fifteen pieces, cast of much larger masses than in the previous works.

The New Bridge, Westminster, in course of construction, will also prove a valuable addition to this class of works.

Upon simple cast-iron beams it will not be necessary to say much. The first application of this material as a beam is due to Boulton and Watt, after whom it was extensively applied in construction by Sir R. Smirke. Although useful in buildings, its fragile and treacherous character renders it hazardous for railway purposes. Capable of bearing a large amount of dead weight, it can be easily broken by a cross blow or the sudden shock of a passing train. Its span has been limited to 40 or 45 feet, and this only under very careful treatment.

With the view of remedying the defects of cast-iron girders, recourse was had to trussing them with malleable iron. Owing, however, to the unequal expansion and contraction of the two metals, and the fact that the two were seldom brought into action at the same time, the success of these beams has been very doubtful. They have been used in spans of 50 to 100 feet, but certain failures appear to have led to their disuse.

The Lea Bridge was erected about ten years ago. The total length is 70 feet, or 66 feet clear bearing. The girder was composed of two castings of a uniform depth of 3 feet, bolted together with wrought plates to the joints and trussing bars.

Dee Bridge, Chester, was the largest bridge of the kind. It crossed the river in three spans, and had a double line of rails with a pair of girders to each. The total length of each girder was 109 feet, or 98 feet clear bearing. It had a uniform depth 3 feet 9 inches, and was formed of three separate castings. Cast-iron plates, 13 feet long and 3 feet deep, were bolted over the top of the joints, and a set of trussing-bars was placed on each side of the girder. The thickness of the web or central part was 2½ inches, the top flange 7 inches wide, the bottom 2 feet. The girders sustained the usual test, yet gave way under a much less load. The failure has been attributed to a variety of causes, but a not unfrequent one has been overlooked, viz. the manner in which the roadway was made to take its bearing on the girders. As a general rule, too much care cannot be taken to give the weight a uniform bearing in a vertical direction, on either cast or wrought-iron girders, more especially the former. Placing the planking or beam on the inside flange will, on the passage of every weight, cause a tilting vibratory motion. If the roadway cannot be placed altogether on the top of the girder, it should be carried underneath it and suspended with plates and bolts.

Tubular girder bridges owe their origin to the manufacture of wrought plate iron, which was first used in ship-building. Great improvements were soon made in the mode of joining and rivetting these plates, and the T, L, and double L iron, manufactured by Mr. Fairbairn, led to the great works which were carried out after its application to railway purposes.

The Liverpool Canal Bridge, on the Blackburn and Bolton Railway, executed by Mr. Fairbairn, was the first application of these girders: the span is 60 feet. The Liverpool Landing Stage Bridge, erected by Mr. Fairbairn for Sir W. Cubitt, spans the space between the pier and the floating pontoon in deep water. Its total length is 152 feet and 142 feet between bearings.

The Gainsborough bridge, erected by Messrs. Fairbairn for Mr. Fowler, crosses the river Trent at the angle of 50 degrees. It consists of two spans, each of 154 feet. There are two girders to each span, carrying a double line of rails: the girders are of an uniform depth of 12 feet: the top is strengthened with a double chamber 3 feet wide by 1 foot 3 inches deep: the width of the girder below is 2 feet 6 inches. The sides of the girder are strengthened by an arched rib of a double L shape, 1 foot deep: the plates are 2 feet wide and half an inch thick.

The Britannia Bridge, by Stephenson, has been fully described, and it is only necessary to give chief dimensions. It consists of four spans, the two main 460 feet, the two side 230 feet, and it is 90 feet clear of high-water mark. There is a tubular girder to each line of rails, the dimensions of which are 30 feet by 14 feet 6 inches. The form of this tube is square, and it is stiffened at the top and bottom with small cells, which answer to the top and bottom chords of the lattice girder.

The High Level Bridge, Newcastle, also by Stephenson, forms a junction between several railways. It is remarkable for carrying a railway above and a roadway for street traffic below, and consists of six spans of 125 feet: the extreme height is 125 feet, and there is a clear headway of 80 feet above the water line. The weight is carried by arches on the level of the roadway, the bottom of which is suspended from it. The piers measure 50 feet by 16 feet, and are lightened by arches. The most striking and peculiar feature is seen from the roadway, which presents a series of dark arched ribs, with light bursting through the bars supporting the sides. The whole design is exceedingly good, and the exterior handsome.

Before entering upon the subject of lattice girder bridges, it is necessary to glance at the timber viaducts, as it is from them that the former derived their origin.

The most remarkable of these structures are the American. The greatest span is that over the Portsmouth river, 250 feet; the greatest height that over Genesse river, 230 feet. As English examples we may mention Dinting Vale, with a span 120 feet by 125 feet; Landore, 109 feet by 90 feet. Amongst the earliest wooden bridges are those designed by Palladio, three of which have 100 feet span: two are framed on the ordinary principle of trussing, and the other on the arched rib or voussoir principle.

The Portsmouth River Bridge is formed on the same principle as the last, with the addition of diagonal bracing to each voussoir. Don Bridge, near Aberdeen, is composed of a strong arched rib, the spandrils between which, and the level roadway above, is a filling in of framing distributing the pressure. Schaffhausen Bridge is similar in arrangement to the earliest American. The weight is carried by a series of raking struts, which radiate from one or more points on piers or abutments, they are bolted to the top and bottom chords of the girder, and transfer the weight of the roadway at regular intervals to the piers.

The Portage Timber Viaduct, the loftiest and most interesting piece of timber work of the kind, crosses the Genesse river at an altitude of 230 feet. This work, designed by Mr. Silas Seymour, was commenced on the 1st of July, 1851, and completed in a period of only thirteen months and a half. The whole length is 800 feet: the piers, 50 feet apart, are formed of wooden trestles, standing on a base of stone 24 feet high. The trestles are formed of timbers 14 inches square at the base, and 1 foot at the top; the braces to the piers and girders are 6 inches by 12 inches: the number of vertical posts at the base is twenty-one, which diminish to fifteen at the top. Three rows of girders, 14 feet deep, formed of diagonal braces, support the roadway. The cost of the bridge was 35,000*l.*; the quantity of timber 135,500 feet. It was estimated that a stone bridge would have cost seven times the amount, and that the interest would renew the whole three times as often as would be required. This may apply in America, but the economy of using timber is very questionable in England.*

ROYAL INSTITUTE OF BRITISH ARCHITECTS.—At the closing general meeting to be held on Monday evening next, the 16th inst. the following paper will be read—"On the Resemblance between Mediæval and Classical Art, as exemplified in the Glass Paintings of the Twelfth and Thirteenth Centuries," by Mr. Charles Winston, Hon. Mem.

* To be continued.

VITRIFIED *v.* POROUS DRAIN-PIPES.

SOME months ago our great contemporary startled the public by a series of revelations, showing the fearful amount of deterioration which had taken place in our staple manufactures,—how that a good knife or an axe were scarcely to be had in Sheffield, and that our colonists preferred Yankee tools to those of our own make. Then, on the other hand, we had the case of the manufacturers, who showed that, if people would pay less for a spade than the price of the raw material, they could hardly expect the very best implement for their money. Doubtless in this, as in all similar matters, cause and effect mutually act and re-act on each other; and while manufacturers are prepared to underbid each other by cheapening and deteriorating their goods, the public will be equally ready to encourage the hurtful competition.

We have been led to these reflections by a discussion which has been recently taking place at the vestry of St. Marylebone, as to the comparative merits of the vitrified stoneware and the porous earthenware pipes, and a report made by Mr. Haywood to the City Commissioners of Sewers.

For the last few years an honourable rivalry has existed among the vitrifying potters in their manufacture, which has resulted in the production of very superior pipes: the thickness has been considerably increased, the body is more intensely vitrified, the form leaves scarcely anything to be desired; and the glaze being wholly silicious, resists every test. These are facts which it is in the power of every one to verify for himself, by a careful examination of those produced by any of the leading potters: the result has been a very general use of these to the exclusion of inferior productions, and consequent benefit to the public.

During the early introduction of the valuable system of pipe drainage, much disappointment was occasioned, and much opprobrium incurred, by breakages and accidents, arising from defective materials; since the great improvement which has taken place in the manufacture we scarcely hear a complaint. Now, however, the old story is beginning to be rehearsed, a less good article is in the market, and seeks to forward itself, like our Crimean axes, that would not cut; and picks and spades, that broke in the handling, by the usual recommendation of *cheapness*. The Marylebone vestry have advertised for *stoneware* pipes, and the porous earthenware manufacturers have sent in tenders, and have urged that their samples (which they admit are porous to the extent of 17 per cent.) are, if not equal in all respects, at least good enough for the purpose; and a sharp contest has ensued in consequence. Fortunately for Marylebone, Dr. Dundas Thompson is their medical officer of health, and Dr. Bachoffner a member of their vestry, both highly scientific men, well qualified to give an opinion on the subject, and they clearly explained to the vestry the difference between impermeable *vitrified* stoneware and superficially glazed earthenware.

Dr. Dundas Thomson, the medical officer of health having been asked to give his opinion, said,—"I may state that this is a subject to which I have paid considerable attention for many years, and my attention has been more particularly called to it since I received at your hands the appointment which I now hold. In examining the various nuisances which I meet with in this parish, I am in the habit of recommending a particular mode of drainage, and by your order these drains have been made of stoneware. Stoneware is totally different from earthenware. Earthenware is a porous, heterogeneous body, and not a homogeneous body. If you examine one of these pipes you will find that it adheres to the tongue, has not a surface like glass, but is in fact a mechanical mixture. What is the object of draining at all in forming the sewers and house drainage? It is to carry away completely and thoroughly from the houses to a distance from town all matter that contains materials which are likely to decompose and produce disease. If you have a porous material for carrying out this object, that porous material will allow the fluid to pass through—that is to say, by disorganising the body, passing through the pores of the material, and lodging in the sub-soil. In order to prevent all that, which would be equivalent to a cesspool, I have required that brick drains should be abolished as much as possible, and their places taken by stoneware pipes."

Dr. Bachoffner in the course of his remarks said,—

"It is true that the Aylesford pipe is slightly glazed, but this glazing is not due to the positive vitrification of the mass, as in the stone ware, but to a mere superficial layer of what is called lead glazing, similar to that employed in the common red pottery,—a glaze that is readily acted upon by chemical agents and sewerage water. It follows, therefore, that while the stone ware is impervious either with or without glaze, the non-permeability of the

Aylesford pipe is wholly dependent upon its thin layer of glaze, and should this be faulty in ever so minute a degree (which it is almost impossible to prevent when large quantities are manufactured), the whole mass is at once rendered permeable. The ill effects of permeability are infiltration and exudation, the probable injury by frost, and the chemical influence of the sewage matter on the substance of the clay. Our officer of health stated, in his last report, that 'it is of the utmost importance to prevent the sewage from percolating the subsoil of London through brick drains and porous pipes,' and I say you are bound to take notice of such an important statement as that. I believe that the glazing of the Aylesford pipes would soon peel off. I find that while hydrochloric acid decomposes the Aylesford pipe, the same acid, even in a boiling condition, has little or no action on the stone ware. As to the mechanical pressure, if you take the difference in the thickness of the two pipes, you will find the result greatly in favour of the stoneware pipes."

Setting aside for a moment all scientific arguments, the question would really seem to be the old one of Place Bricks *versus* Stocks. Every architect or surveyor in the profession has heard the same arguments repeated *ad nauseam*, and has experienced the same attempts to substitute the less expensive materials. The specification generally runs, "that the bricks shall be the best hard, well-burned grey stock bricks. The cutting contractor, after supplying a few thousands of moderately good *stocks*, introduces a quantity of *place:* the surveyor orders them off the ground; then the special pleading begins: the foreman asseverates in the usual formula that they are what was ordered, then that they are as good, that there are no better to be had, and upon being successfully driven from each position, begins to select the best specimens from the last lot, dramatically inviting the surveyor's admiration of the peculiar beauties of each and special fitness for each particular duty. But notwithstanding all his ingenuity, the fact remains the same and cannot be changed by any amount of argument.

Now this is the real point in the case: the vitrified stoneware potters produce an article which is fully equal to its duty, which the public fully appreciate, and which commands a certain value in the market: the earthenware potters offer one at 10 per cent. less cost, using the same arguments as those just cited in the case of place-bricks. If the public with their eyes fully opened to the fact say we will have the inferior article at the lower price, we will drink out of a red pipkin when we can get china tea-cups, why there will be no difficulty whatever in gratifying their tastes; only they must be prepared for one thing, viz. the decline and fall of the superior manufacture. The vitrifiers will very soon turn their attention to pipkins, if pipkins are to be the order of the day; and precisely the same result will follow as in the Sheffield and Birmingham, and indeed all the staple manufactures. Pipes are now at the turning-point in their career: the downward course once commenced, the bottom will soon be reached.

We would do no ill to the Aylesford potters, but we should not do our duty if in this case we did not urge the importance of using the best rather than even the "good enough."

RAILING AGAINST RAILING.

I HAVE often observed, in numerous instances about town, that iron railings are applied in an obtrusive manner; obstructing public convenience without answering any useful purpose. It was the more satisfactory, therefore, to find that the pedestal of Peel's statue, as a first instance, was to be left unencumbered.

The only legitimate and proper purpose of an iron railing, in such cases, is to protect the object it surrounds or fences off; and, if not so required, it becomes an intrusion on the space, and an obstruction of the public convenience, as well as an encumbrance to the building or monument it is attached to. One of the most provoking instances of this kind is the outer railing to the enclosure in front of the British Museum. The pallisading is in itself so formidable, and being set in a plain massive curb of granite, it might surely be deemed sufficient to take care of itself, and to be peculiarly exempt from liability to casual injury. Yet we find an outer rail, and posts topped with little nondescript figures planted round, to keep off the *turba mundi*, requiring the passers-by to make a long circuit at the corner of Montague-street. No doubt the ground thus rendered sacred was part of that purchased by the trustees; but then it was bought with public money; and, if not required for the special object, as is evident by the fact, the public are entitled to use it for the convenience of the thoroughfare. Therefore, the whole of the space outside the enclosure ought at once to be given up, and thrown into the public way, which will then be but of moderate width.

A similar nuisance formerly existed at the north-west corner of the Bank of England; and, as the ground there belonged to a corporate body, and not to the public, it was not so assailable; but common sense and good feeling prevailed over the "dog in the manger" principle: thus much gain has accrued to the public, and no loss to the Bank. The Wellington statue in front of the Royal Exchange has less need, if possible, than that of Sir R. Peel for a protective enclosure (they both abjured "protection"). The pedestal is remarkable for its boldness;—no delicate mouldings, no decoration, and next to no inscription; in short, nothing liable to casual injury. Its position also is the more secure than the other, by being remote from the carriageway: still it has not been exempted from the usual iron railing.

The enclosure of the statue of William IV. at the end of King William-street, is a striking instance of bad taste in this respect; and its intrusiveness is the more palpable from the importance and value of every foot of space at that great confluence of public traffic. The statue, with the whole of its substructure, is of that dreadnought material, granite, forming altogether a picturesque group; but the general outline, and the repose and grace of the composition, are sadly marred by those impertinent stone posts and iron railings by which it is enclosed. Admitted that on some occasions the populace will, in spite of police regulations, avail themselves of any means at hand to get an elevated position for a view: still it will be better, as less liable to accidents, to let them make use of the graduations of the pedestal, than to be stuck about on the posts and pallisading. Many more examples might be adduced of the like obstructions and encumbrances; but I am fearful of appearing to amplify what some persons may deem a small subject. This is an age of emancipation, and for removal of useless barriers; and I am anxious to obtain for public statues and monuments the benefit of the same good movements, more especially as there is a promise of further accessions, that they may be saved from the usual impediment. To this end I invoke the aid of the great censor of nuisances, the *Builder*.

CIVIS.

PUTNEY-BRIDGE.

As a shareholder in Putney and Fulham Bridge, I trust you will allow me to say a few words in reply to the article contained in your paper of the 7th inst.

The bridge was originally built in the year 1728, by commissioners appointed by Act of Parliament, and by them made over to the shareholders, in thirty shares of 1,000*l.* each: a large sum was also paid to the then Bishop of London and Duchess of Marlborough, for their interest in the ferry; and the bishop and his family still retain the privilege of passing over free: provision was also made for the watermen, who receive an annuity of 30*l.* a year.

Although an old bridge (in fact, the oldest bridge on the Thames,—Westminster-bridge having been completed in 1749, and Blackfriars in 1769), it has at all times been well and properly repaired, and, while Westminster and Blackfriars are tottering to their fall, is now in as sound and substantial a condition as when first erected. This statement relies not only on my authority, but on that of a Government inspector, who, a few years since, was sent down to survey and report as to the condition of the bridge.

The centre lock or opening is 30 feet wide: there are also four other locks of 26 feet in width.

With regard to the payment of double toll on Sundays, that is expressly provided by the Act, and, although the shareholders generally would gladly see this tax on the public reduced to the same amount as on other days, yet they are unable, to the prejudice of infant shareholders, or others incapable of consenting, of making this desirable alteration.

With respect to a new bridge company, the shareholders have expressed their readiness to come to terms: a prospectus was issued, but as shares were not taken by the public the matter has dropped.

The erection parallel to the present bridge is strictly an aqueduct, which it was proposed should be taken through the bed of the river.

One thing may be said in favour of the committee of management, viz. that their services are gratuitous, and that the working expenses of the Board are "nil." The bridge is freehold property, and gives votes both for Middlesex and Surrey.

The City corporation may be to blame for allowing an additional obstruction to the river; and, although the shareholders have every wish to forward the interest of the public, yet with their hands tied they can do nothing; and we can only hope that Government, having settled the Eastern question, will now turn its attention to public improvements.

J. F. WADMORE.

THE ORIENTAL STRANGERS' LONDON HOME.

THE contracts for the erection of the charitable but self-supporting institution under this name, at Limehouse, the first stone of which was laid by H.R.H. the Prince Consort, on Saturday before last, have been taken by Messrs. Piper, of Bishopsgate, at 7,649*l.* Mr. C. L. Bracebridge is the architect. The building will be capable of accommodating 230 inmates, with apartments for the superintendent, a hospital, registry, shipping, and secretary's offices, and when furnished throughout, including lighting, warming, hot and cold baths and lavatories, will cost nearly 8,000*l.* besides 1,250*l.* paid for the freehold of the site, which is close to the junction of the East and West India Dock roads, and in the immediate vicinity of Limehouse Church. The object of the directors is to offer to all Oriental strangers who visit England a comfortable and respectable lodging, with wholesome food, at a cost which it is presumed they can afford and which shall render the institution self-supporting. Arrangements will also be made for taking charge of their money and other property, when desired, for making remittances to their families and friends, tendering them advice, and affording them information, protecting them from imposition, procuring them employment in vessels, and providing them with instruction in the English language. Nearly 4,000*l.* have been subscribed towards the institution, including a gift of 500*l.* by the Maharajah Dhuleep Singh, and contributions amounting to 100*l.* by other natives of India, 200*l.* by the East-India Company, 100 guineas each from Messrs. H. and R. Green, &c. The Maharajah, and the young princess of Coorg, were present at the laying of the foundation-stone.

INSUFFICIENT SCAFFOLDS.

TARRANT *v.* WEBB.

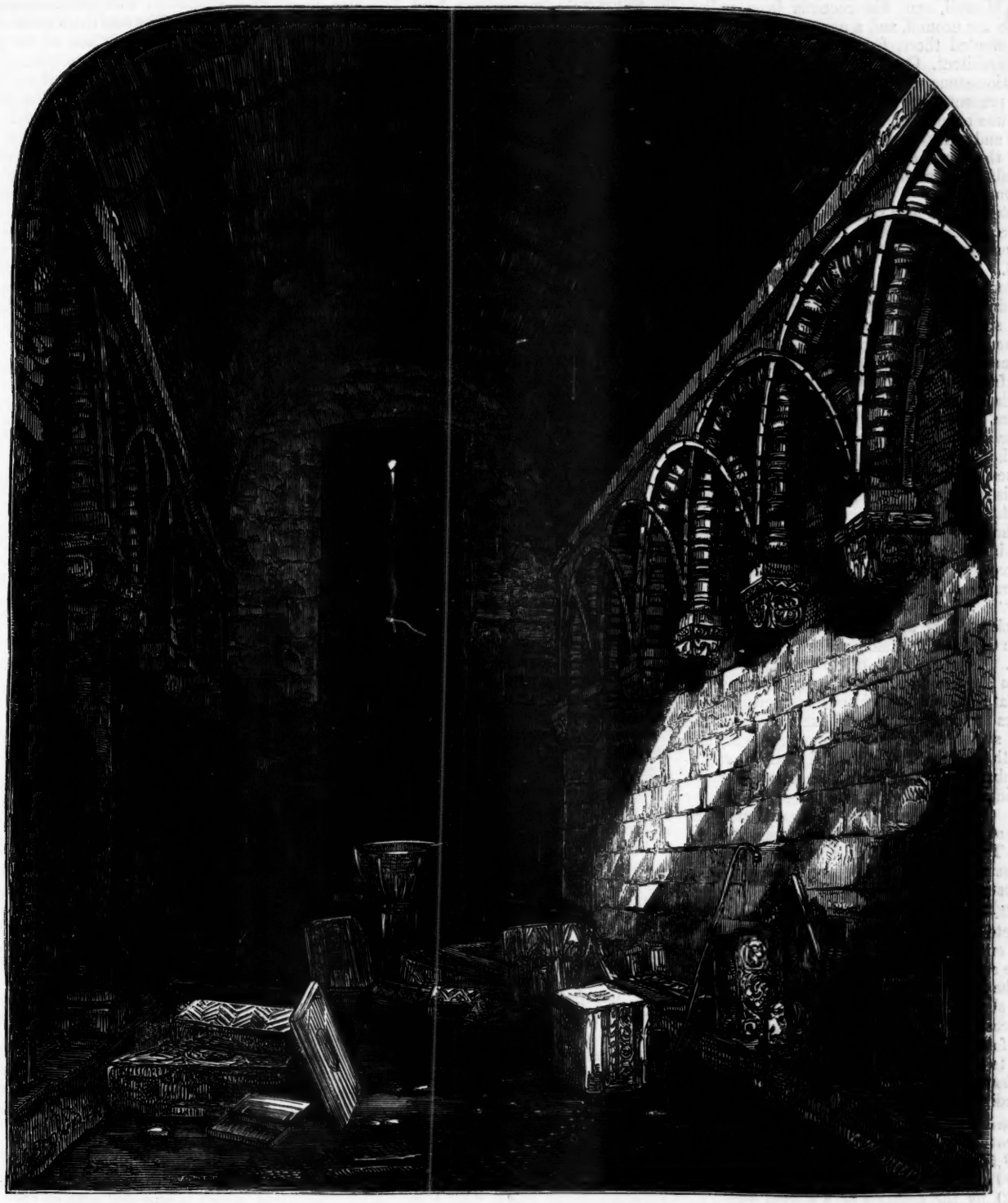
IN the Court of Common Pleas, at Westminster, on the 3rd inst. this case was tried. The defendant is a house decorator and painter, and in October last he was employed to do some work in the interior of the Carlton Club-house. For the purpose of performing his contract, a scaffold was erected (according to the case of the plaintiff) under the defendant's directions, in the hall of that building. The plaintiff, who was employed on the same work with several other men, mounted this scaffold on the 4th of October last: a portion of it gave way, and he was precipitated to the ground, and seriously injured, and he now sought to recover damages from the defendant, who as he alleged, had built the scaffold in an unsafe and insufficient manner.

The defence was, that even if Mr. Webb had erected the scaffold, he was not liable for any accident which might happen to the plaintiff, who, if he saw that the structure was faulty, need not have gone on it.

The jury eventually found a verdict for the plaintiff —damages, 25*l.*

THE NEW NATIONAL GALLERY.—On the 5th inst. the Chancellor of the Exchequer brought into the House of Commons a Bill to provide a site for a new National Gallery.

ST. ALBAN'S ABBEY CHURCH: PASSAGE TO THE CHAPTER-HOUSE.—(*See p.* 325, *ante.*)



PROVINCIAL NEWS.

Headington-hill (*Oxford*).—The residence on Headington-hill, once occupied by the late Mr. James Morrell, sen. has recently been pulled down to the ground, and a new mansion is about to be erected there, from the designs of Mr. Stone, architect. On Thursday in last week the foundation-stone was laid by Mrs. Morrell, wife of the present proprietor. After the ceremony, which was conducted with free masonic observances and a Sax-horn band, Mr. Morrell entertained the workmen with a substantial dinner and half-a-crown each, to commemorate the occasion.

Portsea.—The new school-rooms of the Portsea free or ragged schools are now completed, and, on Tuesday before last, were publicly opened. The building is situate in Richmond-row, Portsea, on a piece of ground the gift of the Ordnance authorities, and is provided with rooms sufficiently capacious, according to the *Portsmouth Times*, to afford accommodation for the education of as great a number of children as the funds of the institution will support for some time to come. The cost of the building has been 950*l.*

Winchester.—The improvements in the barracks here are progressing. The erection of the clock and cupola, in the centre of the west front, is nearly completed, and, says the *Hampshire Advertiser*, "is a measure in accordance with the original plan of Sir Christopher Wren, which, if our memory serves us rightly, included the erection of a dome in the centre of the western front, and two smaller ones at the wings."

Evesham.—The approaches of the new bridge on the Bengeworth side are very nearly completed. In the centre of the parapet, facing both to the river and the roadway, four inscription-plates have been let into the stonework. One ascribes the erection to the exertions and the public spirit of Mr. H. Workman, mayor, and states that the cost was defrayed partly by voluntary subscriptions, partly by the trustees of the adjoining turnpike-roads, and the remainder by rates. One of the other plates contains the names of Mr. James Samuel, engineer, and Mr. James Taylor, contractor. The plates were cast at Messrs. Hardy and Padmore's ironfoundry, Worcester.

Bath.—Although it was found impossible to complete the erection of the hot water fountain at the end of Bath-street on the day appointed for the celebration of peace, it was determined, says the local *Chronicle*, that its formal inauguration should form part of the celebrations of the occasion. Accordingly, arrangements were made for permitting the water from the street mains to play through the fountain, and thus a new feature of interest was added to the day's proceedings.

Birmingham.—New schools are to be erected in Great Colmore-street. It is proposed to expend 1,500*l.* in order to provide accommodation for 500 children; or, if it can be raised, 1,800*l.* for 750, by the addition of a second floor.

Liverpool.—The new concert-room in St. George's Hall is now almost finished, and was to be opened, according to the *Journal*, on Wednesday in the present week. The hall is circular, with the orchestra in the middle of its south side, the floor being a level area in the centre, with a rise towards the periphery of the circle. The whole of this portion of the hall is laid out in rows of benches. A light gallery, supported on sculptured caryatides, sixteen in number, runs round the walls from one side of the orchestra to the other. This gallery is divided into nave-like compartments, of interlacing segments, fifteen in number, with the caryatides placed under the points of junction. In front these compartments present to view an ornamented panelling of white and gold on a ground of vermillion. In the centre of the ceiling is a shaded cupola light of obscured and coloured glass, and from this depends a gas lustre from the establishment of Mr. Ostler, of Birmingham. In the orchestra, composite columns, carved, fluted, and in gold decoration, are placed at each side and along the back of the platform, the intervals between the upper portions of which are filled in with mirrors. The walls of this saloon are divided into ornamented compartments, styles and mounters of fretted gold work, the panels being imitations of elm-root, shaded off with cool-toned fieldings of satinwood, interspersed with beadings of gold, a similar style of ornamentation being carried up into the ceiling. The caryatides are white, with slight gold ornaments introduced into the draperies. The hall is seated for 900 individuals, but additional seating can be introduced to accommodate about 200 more.

Stockport.—A new grammar-school is to be erected on a site near the workhouse, at Shawheath, from plans furnished by Mr. Bowman, of Manchester, architect.

CHURCH-BUILDING NEWS.

Grantham.—The works of the cemetery here are progressing in accordance with a design furnished by Mr. E. Browning, of Stamford. The chapel is in the Gothic style, having a tower and spire 100 feet in height: the whole is to be completed in five months, at a cost of 1,350*l.* The Ancaster stone, worked by Mr. Wilson, is to be used.

Littleport (*Suffolk*). — Littleport Church is being considerably enlarged, by the addition of a new nave and aisle on the north side, at the sole expense of the Rev. E. B. Sparke, the vicar. The expense will be above 2,000*l.*

Bromsgrove.—The consecration of Holy Trinity Chapel, Bromsgrove, took place on Friday in last week. The structure is in the Early English style, and was erected from the designs of Mr. Day, of Worcester, architect, by Mr. Robinson, of Redditch, builder. A school has also been erected in close contiguity to the church.

Taunton.—At a preliminary local meeting to consider as to the restoration of the Tower of St. Mary Magdalene, it has been resolved that Mr. Carver and Mr. Pollard, architects, and Mr. Herniman, builder, should thoroughly survey the tower in its present condition, and ascertain the amount that would be wanted to put it in a good state of repair. They were also requested to draw up a document, to be laid before the churchwardens, who would afterwards bring it before a meeting of the parishioners.

Bidston.—The church of Bidston, now drawing to completion, will be opened on 26th inst. by the Bishop of Chester. The architects for the restoration are Messrs. J. W. and J. Hay; and the builder, Mr. H. Fisher.

Altrincham.—The foundation-stone of a Wesleyan Methodist Chapel was laid on Wednesday in last week, at Bowdon, fronting Stamford-road, not far from the parish church. 1,000*l.* have been subscribed for the purpose by the members of this body in the neighbourhood, 400*l.* of which were given by the Misses Wood. Mr. Peter Wood, M.D. of Southport, laid the stone. The building is expected to cost, including land, 1,700*l.* The architect is Mr. James Simpson, of Leeds; and the contractor, who engages to have the building ready by March 1, 1857, is Mr. Penk, of Manchester. The style of the building is Gothic. There will be seats for 300 persons, eighty free.

Birmingham.—The new church of St. Matthias is quadrangular in plan, and consists of nave, with north and south aisles, chancel, north and south chantries, and sacristy. The church is without galleries. The style adopted is that of the Middle Pointed period, and the material is common brick, with Bath stone dressings, from the quarries of Messrs. Randall and Saunders. The church will accommodate 1,151 adults, 741 for the poor. The nave is 78 feet long by 25 feet 8 inches wide: it is separated from the aisles by an arcade of five bays, with arches springing from octagonal shafts, with moulded caps, supporting a clerestory, perforated with traceried windows, each divided into two lights. The west end of the nave has a large window of four lights, with flowing tracery. This window it is hoped may be filled with stained glass. The chancel, which is 30 feet deep by 25 feet 8 inches wide, has also a four-light traceried window, arranged for figure subjects similar to the west window. The reredos extends across the entire width of the chancel, and is divided by stone columns, with moulded caps and bases, into seven compartments. The floor of the chancel and the aisle floors of the church are laid with the ordinary blue and red quarries, designed by the architect in a series of crosses and croslets, according to the space to be covered. The whole of the pews are of uniform character, with plain square standard ends, and open. The roof timbers are all exposed, and, together with the whole of the woodwork throughout the church, are stained and varnished. The church was built by Mr. James Wilson, of Handsworth, from the designs and under the superintendence of Mr. James L. Pedley, of this town, architect.

Ulverstone.—The estimated cost of the new church at Pennybridge is 750*l.*; and the architect is Mr. M. Thompson, of Kendal. The farmers of Egton-cum-Newland, have given a "boon leading" of stones to the proposed site: about 160 loads were led. The foundation-stone was to be laid in the present week.

Westnewton.—The *Carlisle Journal* states, that the foundation-stone of a new church was to be laid here on 11th instant, by the Freemasons of Wigton and others.

North Shields.—The foundation-stone of the Wesleyan Reformers' New Chapel, in Howard-street, North Shields, was laid on Thursday in week before last. The chapel is to be in the Italian style, and built of stone, to contain 800 sittings: it will be heated with hot water. The front will look into Howard-street, and a large school-room, to be erected behind, will face Norfolk-street. Mr. John Green, of Newcastle, is the architect; and Messrs. J. and M. Robson, of North Shields, are the builders.

Glasgow.—The new church recently completed in Berkley-street, from designs by Mr. Burnet, has been glazed throughout with stained glass. The large front, clerestory, and nave windows being of tinted quarry glass, leaded, with outlined and yellow stained diaper ornaments. The lower front windows are similarly worked, but with the additional introduction of coloured ornamental medallions, also ornamental tracery openings. The large pulpit window is of rich geometrical design on a tinted ground, varied throughout the several lights both in detail and colour. The peculiar nature of the glass employed produces a diffusion of light throughout the building, counteracting any glare which might otherwise have existed. The whole of the work was supplied by Messrs. Tower and Arrol, of Glasgow, and designed and executed by Messrs. Pickington, of St. Helen's.

Perth.—St. John's Roman Catholic Church, Melville-street, Perth, has been re-opened. The entrance to the church is by the tower on the south side, the first division of which is only built: the roof, though temporary, is pointed and slated, and surmounted by a cross. The addition to the church, which is in the Decorated style of Gothic architecture, from designs furnished by Mr. Heiton, jun. of Perth, renders it capable of accommodating nearly double the number it could formerly contain. Its length, which before was 68 feet, is now 103 feet, by 40 feet in breadth. The height of the new portion, which is provided with an open roof, is 65 feet. In the front is a decorated window, 25 feet high, and filled with tracery, above which the gable is pierced by a small window, and its apex crowned by a stone cross. The altar, which is of white Carrara marble, stands in a circular recess, having a vaulted roof, decorated with moulded ribs, tracery, and bosses of Rosso-antico marble, and supported on columns of the same, the capitals of which are in white and gold, against a wall composed of slabs of Sienna marble. The altar is ornamented with burnished gold work, mouldings, and pinnacles, the centre compartment with angels in adoration around the cross. Behind the altar is a painting of the death of the Madonna, brought from Italy. The sacristy on the south side is 22 feet long and 16 feet high, having an open roof. On the north side is likewise a sacristy, besides other apartments connected with the church.

A POTTER'S DEVICE: MAN IS CLAY.—At the Branksea Pottery and Clay Company's premises, on the "Rejoicing Night," the device exhibited showed a drain-pipe within a ribbon inscribed "The Branksea Pipe of Peace," with a wheatsheaf below it, and this motto:—"May we never want for a Pipe nor a Drain!" The joke was at any rate *transparent*.

REGULATIONS UNDER METROPOLITAN BUILDING ACT.

METROPOLITAN BOARD OF WORKS.

AT a meeting of the Board, held on the 6th inst. the following regulations were determined on:—

"That an order be passed directing that all builders or other persons who may be desirous of erecting any chimney-shaft of a steam-engine, brewery, distillery, or manufactory, the same being buildings to which the rules of the Metropolitan Building Act, 1855, are inapplicable, shall, before commencing any such building, make an application to this Board, requesting their approval thereof, setting out a plan of the proposed building, and such other necessary particulars as may be required by the Board.

That the following rules and regulations with respect to applications to the Board, under the Metropolitan Building Act, and the 143rd section of the Metropolis Local Management Act, be adopted, and that they be printed and issued to the public.

All applications must be made in writing on foolscap paper, setting forth the nature of the building, work, or other matter, the situation and district in which the same is to be built, and describing all necessary particulars as to the proposed mode of construction, stating under which section of the Act the sanction is sought: to be accompanied by plans and sections drawn to a scale of one-eighth of an inch to a foot (when practicable), with dimensions and thicknesses figured thereon, together with a block plan to a smaller scale, showing the situation of the building with reference to adjoining buildings, and to the ground of any adjoining owner. In the event of the sanction of the Board being granted, duplicate drawings or tracings must be supplied by the applicant for enrolment in the office of the Board, and for transmission to the district surveyor for his guidance.

Applications that are not received at the office of the Metropolitan Board of Works (No. 1, Greek-street, Soho), at least three clear days before the next meeting of the Board, cannot be entertained at that meeting.

That the following fees be demanded and received by every district surveyor under the Metropolitan Building Act, 1855, who shall perform any of the services hereinafter enumerated, the same being special services required to be performed under the first part of the Metropolitan Building Act, 1855, for which no fee is specified in the first part of the second schedule to that Act; viz.:—

For the supervision of Furnaces and Chimney-shafts.

For every furnace and chimney-shaft belonging thereto, not exceeding 75 feet in height	£1	10	0
Not exceeding 100 feet	2	0	0
For every 10 feet in addition, up to 150 feet	0	2	6
For every 10 feet in addition, above 150 feet	0	5	0"

It was further determined;—

That the committee be authorised to submit a case for the opinion of counsel as to the extent of the powers of this Board under sec. 49, Metropolitan Building Act, with respect to altering the fees payable to district surveyors in respect of the matters specified in the second schedule to the Act.

THE THEATRE AND MUSIC.

The Royal Italian Opera House.—Madame Ristori, the Italian tragedian, now acting at the Lyceum on off nights, and for whom London is indebted to Mr. Gye, is a wonderful artist, and should be studied by other artists. With a full recollection of Rachel, we are much disposed to consider her the greatest actress now living, uniting, as she does, to the power and energy and modulated elocution of the great French actress, an amount of tenderness not possessed by her. Madame Ristori's personation of "Medea" is a study for painters and sculptors, as well as a delight for the lovers of dramatic power in its highest development. Mr. Gye's arrangements for the erection of a new opera house are progressing. He hesitates, we believe, between the old site, which is offered to him on fair terms, and one farther west.

A Model.—It may be useful to mention, that a very elaborate model of a theatre, prepared, we believe, for King George IV. has been deposited in the Architectural Museum, Canon-row, Westminster, and deserves examination.

The Surrey Theatre.—Messrs. Beale and Co. have opened the Surrey Theatre with a very good Italian company, for the performance of operas. "Norma" and "Lucrezia Borgia" have been well represented. Every well-meant endeavour to provide good music for the multitude should have support.

Young Musicians.—The performances of the Brousil family at the Gallery of Illustration, in Regent-street, are very remarkable. It consists of six children, ranging from six years old to seventeen, and they all display surprising skill and taste.

PROPOSED MEMORIAL CHURCH AT CONSTANTINOPLE.

IT may serve as an assurance to several correspondents to mention that the committee entrusted with the duty of giving effect to the resolutions of the public meeting, held April 28, 1856, under the presidency of H.R.H. the Duke of Cambridge, have invited architects to send in designs for the Memorial Church, which it was then determined to erect at Constantinople. The competition will be unlimited and anonymous. The style to be adopted in the designs must be a modification, to suit the climate, of the recognised Ecclesiastical Architecture of Western Europe, known as "Pointed," or "Gothic," and the neglect on the part of any architect of this provision will absolutely exclude from competition.

The church must be of sufficient capacity to hold without galleries a congregation of not fewer than 700 persons, while the cost must not exceed 20,000*l.* a sum sufficient in the hands of an able architect to ensure the monumental character of the structure.

In order to ensure competence and impartiality in the adjudication, the committee have entrusted the selection of the successful designs to the following gentlemen;—The Right Rev. the Lord Bishop of Ripon; Sir Charles Anderson, bart.; the Very Rev. the Dean of Ely; the Rev. Professor Willis; and A. J. B. Beresford Hope, esq.

The judges will be entitled to award a first prize of 100*l.* and a second and third prize of 70*l.* and 50*l.* or in case of equality, two second prizes of 60*l.* each. The design to which the first prize is adjudicated will, without some special reason to the contrary, be the one carried out; and the amount of the prize will be ultimately deducted from the architect's commission. After the decision, all the designs will be exhibited.

MASONS' STRIKE AT CARDIFF.

A STRIKE of a very unreasonable, and, indeed, absurd description, has occurred at Cardiff. The workmen, in the course of last month, issued what they call a "Code of Laws," the "3rd proposition" in which is to the effect that no worked stone shall be allowed to be introduced into Cardiff by the employers, except machine-worked chimney-pieces and slate. The "2nd proposition" is to the effect that every workman, whatever his worth or skill, shall be paid alike at a fixed rate of wages, namely, 5s. 6d. a day for "public jobs," and 4s. 6d. for "private jobs." In laying down this "Code," the operative law-makers state that "if the masters require any alteration from this code of laws they must give three months' notice to the men of their intention of seceding from any of these laws at the expiration of the first three months;" and, in order to let the masters see that they were actuated by *equitable* principles, they thus apply the T-square to the other side of the question. "Also, if the men require any alteration in the laws herein mentioned, *they* will give three months' notice of such intention of alteration after the first three months have expired!" The masters of course refused to have the "law" laid down to them under any such equitable codification, and the consequence was, that the law-makers struck work. Just now Cardiff has made a considerable start in the building trades, some new streets being in course of formation. Prudent men would have hesitated ere they checked such a start, especially in a comparatively small town like Cardiff, by creating any disturbance of settled relationships with those whose business it was to provide for the trade's welfare by encouraging capitalists, by moderate charges in their contracts, to continue the expenditure of their money in such a line of improvements. It is only very indiscreet and foolish persons who can imagine that, by immediately taking an undue advantage of such a crisis to lay down restrictive rules that must forthwith raise the cost of the improvements which capitalists seem inclined to go on with, they are likely thus to secure an increased share to themselves of the profits that are going. One of the chief reasons, on the contrary, which the master builders in this case urged for rejecting the "3rd proposition" was, that it is "unwise and impracticable, and moreover would not benefit the workman himself, while it would increase very much the cost of buildings in the town," and hence, of course, put a stop to them till starvation induced the Cardiff masons to be thankful of anything lik a job at all. What would the operative masons of Cardiff think of an attempt of, say for instance, the home-knit stocking-makers of Cardiff (if there be any such) to prevent the introduction of stockings made anywhere else for behoof of the Cardiff masons? Would they not feel that these workers in wool wished to fleece their fellow-workers in stone? Suppose that the Cardiff tanners laid down the like code of laws in regard to the home-made leather of Cardiff,—its blacksmiths and tool-makers the like in respect to home-made tools,—or the home-spun weavers the like as regarded clothing. The absurdity of such pretensions would very speedily become clear to the masons of Cardiff. The master builders, we think, are quite right to resist such pretensions on the part of their workmen, as they seem determined to do; and we hope the resistance will induce the workmen shortly to listen to reason, and indeed to self-interest in the matter. Is it not surprising that they do not see that, by insisting, during a push of business, that the masters shall have all the stone requisite at the moment worked in the town itself, they would compel them to bring in additional hands, who would remain as competitors with themselves for every minor job after the push was past? Or do they desire to cramp or restrict the building operations at Cardiff within the limits of their own individual capabilities? What *would* they they be at?

WAYS AND MEANS FOR ART AND OTHER IMPROVEMENTS.

IN the House of Commons, on the 6th inst. several votes of money were taken for purposes which require a notification in our columns.

On the proposal of a vote of 2,000*l.* for a National Gallery of Portraits of Distinguished Persons, some discussion ensued, and the Chancellor of the Exchequer stated that there would be no necessary connection between this gallery and *the* National Gallery. There were an immense number of historical portraits in this country, owing to the exemption of the people from the effects of war; and the Government hoped that if a gallery of this sort were established, patriotic persons might contribute such portraits to the nation. Copies would also be made by competent artists of others not to be parted with by their owners. The Government wished to begin with a temporary exhibition, voluntarily contributed, in the new building shortly to be opened (at Kensington-gore), in which there would be found room enough for all purposes. Their ultimate object, however, was to form a national collection which would be an honour to the country. Mr. Spooner opposed the vote on not very clear grounds; but it was agreed to by a majority of ninety-seven against twenty-eight.

The next vote was for 10,000*l.* "for expenses of removing the collection at Marlborough House to Gore House." Mr. Wilson said, the collection must soon be removed to make way for the Prince of Wales. Mr. Disraeli, Sir Joseph Paxton, and other members approved of the vote; and Mr. Spooner opposed it. The present partnership between the Government and the Royal Commissioners, he said, ought to be dissolved, and the property got rid of with advantage. His conviction was, that the 150,000*l.* some time since agreed to would yet be seen to grow up to 1,000,000*l.* Mr. Wilson said the present vote had nothing to do with the purchase of the estate. It was intended for the erection of an iron building for the reception of the articles of art which, sooner or later, must be removed from Marlborough House: a more economical arrangement could not have been made. As to the property at Kensington-gore, the Government would have power over the erection of buildings on one-half of it. As regarded Burlington House, no plan had yet been decided on for building on that site. The Royal Society, who in the meantime were to be accommodated in the present building, on giving up their apartments at Somerset House for Government purposes, were willing to open their magnificent collection of portraits at all times free to the public. Colonel Boldero wished the site they were now disposing of (at Kensington-gore) could be devoted to the erection of new barracks, as Lord Portman was demanding the surrender of those in Portman-street. The vote was then agreed to without a division.

A sum of 24,700*l.* was then proposed, to defray the expense of making a new road from Buckingham-gate to Pall-mall, with a foot-bridge over the ornamental water. Lord R. Grosvenor moved that the vote be postponed for six months, with a view to the reconsideration of the St. James's-park improvements by a select committee. Opening a road through the park, with various turnings right and left, would not effect the object in view. His lordship defended the project of a bridge across the water in St. James's-

park. Sir Benjamin Hall was surprised at such a project coming from one of the select committee who voted for the measure to carry out which the present vote was proposed, and against that now advocated. Mr. Tite said all that was wanted was a communication from Belgravia through Pall-mall, and he could not understand why it should not be granted. To part of the plan now proposed he objected. The sudden turn at Marlborough House was inconvenient. They should have a straight road, 40 feet wide, and that would enable them to give the width of 70 feet to Marlborough House. If that were to be done, it would cost only about the odd hundred pounds of the vote. He objected to the pulling down of the German chapel. It was considered by the most distinguished architects of the day as a gem inside, and associated with many historical recollections. There was no necessity at all for interfering with this chapel. Let the entrance to Marlborough House be in Pall-mall, and all the advantages which he proposed could be obtained. His proposition was—"That the road from Pall-mall into St. James's-park be so placed that the necessity for pulling down and rebuilding the German chapel be avoided, and that the 10,000*l.* provided for doing so be omitted in the estimate, thereby reducing the cost of the new road and other works to 14,700*l.*" He believed that by the adoption of his proposition they would be doing justice to themselves, and saving the country from a large and unnecessary expense. Sir J. Paxton did not think that the hon. member for Bath had improved upon the plan of removing the German chapel. Such a plan as that proposed would have the effect of impeding the entrance to St. James's Palace, and creating inconvenience. It was not proposed to destroy the German chapel, but to remove it to some more convenient spot. He thought it would be desirable to postpone the consideration of this question. This was finally done by a majority of 192 to 70 against the present grant of the sum asked for.

GOVERNMENT ILLUMINATIONS.

Is it not strange, that whilst this country supports a Department of Art, in which 27,000 persons are receiving an art education; whilst in the central training school for masters there are upwards of forty men qualifying themselves to receive appointments as drawing-masters, there could be found no man to direct the illuminations of our Government offices,—no artist or architect to design an illumination which should not be a national disgrace, or outstripped by private individuals?

Could anything be more atrocious than the blocking up of the front of the National Gallery with a coating of black boards, and the exhibition upon them of a set of sickly-looking, badly-drawn flags? Is the only use of such a portico in a case of general rejoicing to be blocked up and hidden religiously from our sight?

Had outlines of our public buildings been sent to the office of any good architect, or to a public academy, that designs might be made to suit the character of each building, we might not now have been the jeer of our neighbours for the signal failures in our national illumination. "Oh, John Bull!" said a Frenchman, whilst surveying the Ordnance Office, "when will you make use of your own resources?

A STUDENT.

COMPETITIONS.

Bolton Cemetery.—At a recent meeting of the Bolton Burial Board, it was resolved that from the competition plans submitted, the designs No. 5 and No. 7, furnished by Mr. Charles Holt, architect, should be adopted. No. 5 is an Early Decorated design for a detached chapel, and is to be for the use of the Roman Catholics, and No. 7 an Early English one, for the use of the Episcopalians. A contract has been made by Mr. Robert Burrows, builder, to complete the two for 1,222*l.*

Chesterfield Cemetery.—The competition here has been great, no less than thirty-six plans for the buildings having been sent in: the plans for laying out the burial-ground numbered fifteen. After a comparison of the respective merits of the many designs, the committee decided on accepting those submitted under the motto "Perseverance," which, as was afterwards proved, were furnished by Messrs. Bidlake and Lovatt, of Wolverhampton. The chapels, while they are under one roof, are quite distinct from each other, the entrance to the one being on the south side, to the other on the east. They are exactly the same in size, viz. 34 feet by 18 feet, and the same in accommodation, while an individual character is given to each by adopting the earlier and later periods of the geometric style, the former being that in which the Dissenters' chapel has been designed, the latter that of the Episcopal. The materials to be used in its erection will be stone from the Wingerworth Bole-hill quarries, with dressings of Horton stone, the same classes of material as have been used at the grammar-school and the master's residence at Chesterfield: the roofing will be open timbered, and covered with the Staffordshire brindled tiles: the floors generally will be quarried, those of the pews of wood: the woodwork of the sittings and roof will be stained oak and varnished. The second premium was awarded to Mr. Drury, architect, Lincoln. The committee afterwards turned to the consideration of the best plan for laying out the burial ground, and after examination selected, for execution, the one signed "Pro Salute Publica," which proved to be the work of Mr. F. C. Gillett, of Chesterfield. The plan which was considered second-best was by Mr. Kitching, of Chesterfield.

PROPERTY INJURIOUSLY AFFECTED BY RAILWAYS.

A COMPENSATION CASE.

A JURY case under the Land Clauses Consolidation Act, of considerable importance to railway companies, was tried last week at the Portland Hotel, Greenwich, before Mr. Palmer, the Under Sheriff, and occupied two days. Mr. Browne was counsel for claimant, and Mr. Woollet for the company.

Mr. Penny, of Lewisham, builder, has premises consisting of a house, garden, builder's yard, workshops, stables, and cottage, within about 60 feet from the side of the station there, and he claimed from the South-Western Railway Company the sum of 420*l.* for depreciation in value, and injury done to his leasehold interest for twenty-two years in the said property, by reason of the loss of privacy in his house and garden from being overlooked by the public from the station, which is on an embankment about 20 feet high; by noise occasioned by the passing of trains; by injury to the buildings from vibration caused by passing trains, more particularly the express and goods trains; and by consequent increase in the annual cost of repairs.

Mr. Smith, Mr. Danes, Mr. Kirkham, surveyors, and other witnesses to facts, were examined in support of the claim. Mr. Charles Lee, Mr. Edward Ryde, Mr. Ritchie, surveyors, and Mr. Nicholson, builder, were examined for the company.

The Under Sheriff ruled that noise and depreciation in value were not proper subjects for compensation, but that substantial injury to buildings, and being overlooked, were, and that the property might be in those respects injuriously affected, and he so charged the jury, who gave a verdict for the claimant of one hundred guineas damages.

This case actually raises the question whether all the houses on each side of the Greenwich, Blackwall, and the other railways entering London, on arches and embankments, are not injuriously affected by being overlooked and their privacy destroyed, and whether the owners could not obtain compensation from the respective companies;—a very serious affair.

PROGRESS OF SEWAGE DISINFECTION AND SOLID MANURE AT LEICESTER.

THE Patent Solid Sewage Manure Company have issued a circular giving the following amongst other particulars as to their progress, at Leicester, in disinfecting the town sewage, fixing and precipitating its ammonia, salts, and other fertilizing matters; and condensing the fertilizing ingredients into a solid manure,—all by one continuous operation under covered sheds. The directors of the company state that they have abstained from bringing their undertaking before the public until their Leicester permanent works had been in perfect and regular action for a long period. These works were opened in May, 1855. They have been in operation, day and night, ever since, and without the slightest nuisance, they say, even in the works themselves, on the sewage of a population of 65,000 inhabitants, and the refuse of the manufactories of the borough. The success they maintain has been complete. From eighty to ninety tons of solid sewage matter, it is said, are separated every week from about 95,000 tons of sewage, the liquid portion flowing into the river Soar in a disinfected and inodorous state, so as to be fit even for drinking and other household purposes. The manure is sent out either in the form of bricks or in a dry powder. Above 500 tons have already been taken by agriculturists. Ten tons of the manure are offered, at the cost of carriage and bags only, to the authorities of any town contemplating the adoption of the system, in order that neighbouring farmers may satisfy themselves as to the value of the manure. Plans, drawings, and estimates for the patent works and machinery are furnished professionally by Mr. Thomas Wicksteed, C.E. under whose superintendence the drainage of Leicester has been carried out, and the company's works established. The deep drainage of Leicester was completed and the sewage works in full operation in the summer of 1855; and it appears that the mortality has coincidently diminished from 450 in the quarter ending March, 1855 (or 420 in same quarter of 1854), to 340 in the quarter ending March, 1856,—an improvement doubtless in some degree, at least, attributable to the sanitary works effected in 1855, although the returns generally throughout the country this year have been more than usually favourable to life and health. The only question, perhaps, as to the utility and the permanent practicability of the solid sewage system relates to the influence of the lime used on the fertilizing power of the matters fixed or separated by its means. It is very desirable that this question should at once be decided by some agricultural chemists in whose verdict the public would place confidence.

INAUGURATION OF THE PRINTERS' ALMSHOUSES.

THIS event took place on Wednesday, the 11th inst. and was celebrated by a public breakfast in the grounds of the Institution, at Wood-green, near Hornsey. The Earl of Stanhope, president of the Institution, presided on the occasion, and was supported by the treasurer, Mr. W. Clowes, the trustees, and a large body of stewards, comprising many of the leading London publishers, some of the more eminent of the stationers, and most of the principal master-printers of the metropolis. The company included many foremen and managers from the greater printing establishments, together with the working committee of the printers, by whom and by whose exertions mainly the institution was founded and the building erected. The whole proceeding was, moreover, graced and adorned by the presence of a goodly number of wives and sweethearts, sisters and daughters.

It appeared that although, by the exertions of the operative members of the profession the ground had been obtained and the building erected, the means of providing for the aged or disabled members, for whose benefit the Institution was created, were still wanting, except as to three, and these had been already elected. The day's proceedings will probably have the effect of doubling this number, so handsomely have the masters contributed to the requisite endowment.

After the formal induction of the recipients of the forethought and kindness of their brethren to their respective tenements, and the bodily refreshment of the company (about 200 in all), had been duly effected, the noble President addressed the assembly on the subject of the meeting especially, and generally on the progress printing has made, and in its effects on society at large, by the means it affords of diffusing truthful information, as well as fulfilling its proper office of the handmaid of Literature.

Mr. John Murray, in proposing the health of the Chairman, reminded the company of his Lordship's hereditary claim to the respect of printers, and of all who benefit (and who does not?) by improvements in the art of printing.

Mr. R. Clay acknowledged the complimentary toast to the Master Printers; Mr. Bohn that to the Publishers: Mr. Gough Nichols answered for Literature, and Mr. W. Spottiswoode for the Stewards.

The only personal toast, except that to the Chairman, was to the Treasurer, of whose service to the Institution, and personal worth, Lord Stanhope spoke most heartily, and of which, in acknowledging, Mr. Clowes spoke most modestly.

The only discord throughout (if that may be so called which was most willingly listened to) was the frequent announcement by the secretary of fresh and fresh contributions to the funds of the Institution.

OXFORD ARCHITECTURAL ASSOCIATION.

THE annual meeting was held last week. In their report the committee said,—"The check given by the war to the progress of public works generally has had little, if any, effect on church building, and during the present year many excellent restorations have been carried out, and not a few fine churches built. In Oxford especially, your society has had from time to time to call attention to the successful restorations and enlargements effected in several of the colleges and city churches, by Mr. Scott, Mr. Street, Mr. Buckler, and others. The buildings in the Broad-street, belonging to Exeter College, are now completed. They have been noticed several times, during their progress, with commendation, and now that they are finished, your committee can have no hesitation in pronouncing them superior, in general effect, to everything else that has been erected in Oxford during the year. The old buildings within are being rapidly demolished, and foundations being dug for a very fine building on the east side of the quadrangle, which will contain the rector's lodgings, and will, with the new chapel (about to be erected shortly), complete a new quadrangle. A new feature in Oxford Collegiate architecture—stained glass in the staircase windows—has been employed in the Exeter-buildings, with

excellent effect. This glass (executed by Mr. Lavers, of London), consists of quarries resembling Powell's quarries, but stencilled instead of stamped. The new library at the same college is very nearly finished, and is a most satisfactory work. At Balliol the old chapel has been demolished, and your committee, though they have not seen the drawings, expect a work fully worthy of the distinguished architect employed—Mr. Butterfield. The president's-room in the lower gateway of Magdalen College is in course of restoration, by Mr. Scott. Your committee have also noticed with approbation Mr. Buckler's restoration of the front of Jesus College. But the work of the day in Oxford is, without dispute, the splendid museum now in course of erection in the parks, which your committee in their last noticed as being but then begun."

RECENT PATENTS.

THE following are selected from the lists of specifications of patents recently granted, and published of late in the *Mechanics' Magazine*:—

Wohlgemuth, P. F. The Construction of Bridges. The patentee proposes to construct bridges of pontoon-shaped iron boats. Two or more of these boats may be braced together with diagonal tie-bars. The bottoms of the boats are to be firmly tied together by a circular concave iron frame, keeping under water a number of hollow iron caissons or cylinders, at 50 feet from the surface. One or more piers, 100 feet high, are erected on the platform, and braced together by diagonal tie-bars, forming frames on either side to support the top and sides of piers, themselves being the starting-point of the arches.

Spilsbury, F. G. and F. W. Emerson. Improvements in the Manufacture of Paints and Pigments. Claims.—1. The use of the tungstates of oxides of zinc, calcium, antimony, aluminium, magnesium, barium, and strontium, as paints or pigments. 2. Any combination or mixture of two or more of the aforesaid tungstates. 3. All mixtures or combinations of the above-mentioned tungstates with oxide of lead, in whatever manner produced. 4. All mixtures of the aforesaid tungstates, whether with or without oxide of lead, with the antimonites, antimoniates, arsenites or arseniates of any of the aforesaid bases, when applied to the manufacture of paints or pigments.

Stansbury, C. F. An improved changeable Lock. This invention consists in forming a lock with a number of tumblers so arranged that they can be worked by means of a key with changeable bits, so that when the bolt of the lock is thrown out by a certain arrangement of bits, it can only be thrown back by the same arrangement, and yet admitting of innumerable changes of the relative positions of the bits on the key without requiring a change in the tumblers.

MARTIEN, J. G. Improvements in the Manufacture of Iron and Steel. This invention has for its object the purifying iron when in the liquid state from a blast furnace or from a refinery furnace, by means of atmospheric air, or of steam or vapour of water applied below, so as to rise up amongst and penetrate every part of the metal prior to the congelation, or before such liquid metal is allowed to set, or prior to its being run into a reverberatory furnace in order to its being subjected to puddling.

Burley, Thomas Haley, of Ohio, United States of America. A new Machine for making Dovetails. This invention consists in giving obliquity to the cutting edges of the saws, in combination with inclined fronting-guides or tables on which the pieces to be mortised are to be brought up to the saws, and in arranging the series of chisels with inclined cutting edges over a double inclined cutting bed or table.

Lee, Henry, the younger, of Lambeth, Surrey, contractor, and John Gilbert, of Hackney-road, Middlesex, engineer. Certain Machinery for Mixing the Substances used in the Formation of Concrete and other like Substances. This invention consists in mounting a cylinder or case upon a shaft, and in providing such cylinder or case with an aperture and cover, which forms both the feed and exit passages for the materials. Rotary motion is communicated to the cylinder, and after having been continued a sufficient time the cylinder is stopped with the aperture downwards, the cover is removed, and the concrete runs out. Half a revolution is given to the cylinder, a fresh charge is inserted, the cover placed over the aperture, and the operation repeated.

Coniam, T. T. Improvements in Tiles for Roofing. This invention consists in making tiles with edges turned up on three sides, so as to lock into each other.

Muller, Emile, civil engineer, Joseph Gilardoni, and Xavier Gilardoni, of Rue de Provence, Paris. A grooving and clamping hooked tile, by means of which the entire covering of a roof is tied together. A machine, for the fabrication of such tile, by which it is continuously delivered from the mould through a peculiar system of delivery, applicable to any matter that may be moulded, and a continuous succession of furnaces for its burning. The inventors describe certain improved tiles, so shaped that a recess in one falls over a projection on the other, the whole being afterwards clamped together by means of metallic wires, &c.

Jones, E. G. An improvement in flattening cylinders of sheet glass. This invention consists in flattening such cylinders in a vertical position, simply by the action of the fire, without resting them on any substance which might affect the polish of the surface of the glass. The cylinder is gradually heated in a kiln, and then carried by suitable pincers to a carriage on a tramway, where it is allowed to partially develope itself by the heat of the kiln: it is then pushed along to the front of a flashing furnace, by the heat of which it is brought perfectly flat. It is then detached from the pincers, piled up in a kiln or moveable apparatus, and annealed in the usual way.

Bowron, James, of the Tyne and Tees Glass Works, South Shields. An improvement in the manufacture of glass tiles. Claim—The manufacture of glass tiles by pressing them from fluid glass, instead of first making the glass into sheets and then shaping it.

IMPERFECT STILL.

There is a touching, teaching, though perhaps an untrue, story,—
But 'tis warm with the weird wisdom and sanctity of eld,—
How within the Coliseum strayed an old man bent and hoary,
'Mid Titan trunks of orders by Time, the tyrant, fell'd.

Tho' the snows of fourscore winters his heavenward head encumbered,
Like the prophet on Mount Nebo, whose stern lineaments he limned,
On the Sistine vaults Valhalla with saints and seers unnumbered,
His force was unabated, his eager eye undimmed.

'Twas he who at St. Peter's hung on high the daring dome,
That stretches like the firmament above the gazer's ken;
And in many a princely palace in the regal realms of Rome,
Brought down the gods on earth in the likenesses of men.

The softened southern sunset shed a melancholy glory
O'er his features, as in Ghirlandaïo's pictures of the blest;
And o'er the Pincian hill heights, on cloud cushions rent and gory,
The day-god lay a-dying along the flaming West.

And while with mute devotion on those shatter'd shafts he pondered,
Those vague and crumbling arches, those thoughts carved out in stone,
A reverent disciple asked the old man why he wandered
Amid the sullen shadows of that fallen fane alone.

The painter-poet turned him as one awaked while dreaming,
And the young man felt a fiercer fire within his bosom burn,
As gazing on his flashing face with faith and fervour beaming,
Buonarotti bow'd his lordly brow and answer'd him,—"*I learn.*"

Be this tale or truth, or fable, it at least one lesson teaches.
And 'twere well if on the table of each heart there were enwrit,
This truth it more than labour'd lore or Pagan precept preaches,
So long is art—the longest life is all too short for it.

JOHN HEBB.

Notices of Books.

VARIORUM.

"THE Action of Water on Lead," by Dr. H. Osborn, of Southampton, has reached a second edition. In this little sixpenny tract, to be had of Sharland, of Southampton, will be found some useful information (though we do not mean to commit ourselves to all that is said), not only as to the action of water on lead, but also on the symptoms produced by poisoning by lead, caution as to the use of lead pipes and cisterns in certain localities, and a mode of detecting the presence of lead in water. Dr. Osborn, if we recollect rightly, was one of those correspondents who addressed us at the time when we first brought this subject under public notice.——"Nomos" is the title of a volume just published by Messrs. Longman and Co. in which an attempt is made to demonstrate a central physical law in nature. The author, whose name is not given, here endeavours to show that "the law of the laboratory" (the expansive power of heat being, more especially, it seems, referred to under this law) must be regarded as a cosmical law. The force of gravity, itself, he conceives, is not sufficient to account for every phenomenon in which it is supposed to be the principal or exclusive agent; and, certainly, the manifest tendency of the planetary orbits, for instance, to *circularity* of route is not explicable by the mere law of gravitative attraction, which manifests its power in elliptical and parabolical routes; but, rather strangely, the present author seems, somewhat inconsistently with himself, to reject a principle of repulsion as co-operative with the principle of attraction in cosmical affairs; whereas the expansive power of heat which he recognises as the great antithesis of the attraction of gravitation is just *a* mode of repulsive force, at least as much so as is gravity a mode of attractive force, the truth being that both terms—attractive and repulsive—imply hypotheses as to the *modus operandi* of the phenomena of aggregation and segregation, or concentration and radiation, of masses and spheres, with which it is unnecessary to entangle one's thoughts at all. It is refreshing, however, to peruse the work of any original thinker in these times of prostrate adhesion to great authorities, however much one may differ from him on various points: differences are often much more interesting, instructive, and suggestive, indeed, than accordances.——"A Natural History of the Animal Kingdom," by W. S. Dallas, F.L.S. is a goodly volume, with numerous illustrations, just issued by Messrs. Orr and Co. of Amen Corner. It apparently comprises one division of their "Circle of the Sciences" completed, and contains a vast amount of interesting knowledge in regard to the habits, structure, and classification of animals, from the lowest forms to the highest,—opening the mind and filling it with wonder and delight, as well as enhancing the interest with which it notes those manifestations of life by which every one is surrounded; from the insect that dances in the sunbeam, to the intelligent animals who in so many instances act the part of faithful slaves to man.——"June; a book for the country in summer time," by Mr. H. T. Stainton (Longman and Co.), may very appropriately be noted here in corelation with the more important work just alluded to. This little volume is one of very light reading, certainly; but slight as its texture may be, it has an odour of natural history and general intelligence, and kind feeling, too, about it, that will make it a pleasant enough summer companion in the country, in one of those little excursions to which we have often urged our own younger readers in the profession, *sketch-book* in hand *at least*, if not with herbarium or entomological case along with it. To give a specimen of the author's quality, let us take a paragraph from "June, in Sussex."

"Let us turn into this meadow," says he, "still gay with the flowers of the marsh marigold (*Caltha palustris*), and wandering on till we come to where it skirts a little wood, repose awhile, and, while listening to the merry songsters of the little thicket, the humming of bees, and the murmur of the little streamlet, let us note the varied vegetation of the grassy bank. Here, the golden broom, with all its rank luxuriance of blossom, seems to challenge us to produce a garden plant more beautiful; there, the bank is blue with speedwell (*Veronica Chamædrys*) a more modest plant, but of which the flower is pleasantly intertwined with our earliest recollections of summer time in the days of our childhood, when the days were far longer than ever they are now, and when the pleasure was to gather a nosegay of wild flowers, little caring what became of them afterwards. Perhaps some can recall those days, and can remember how their older companions, though not sharing in their childish glee, were yet pleased to see them pleased; and will not this reflection, rightly used, lead us to perceive that by being pleased then we were the cause of pleasure to others, and that so it must be now; and that when we enjoy any pleasures given to us, He who gave them is pleased at our enjoyment of them? I have no patience with those who advocate ascetism and gloom: everything not pleasant at the time will be found by experience but a step to greater pleasure afterwards, and hence evil is permitted as a means (why or wherefore we know not, nor should we inquire) of obtaining greater good than could otherwise have been arrived at."

——"Life in the Trenches," another little volume just issued by the same publishers, treats of far different scenes and pursuits. This is one of those interesting "tales of the wars," which the returned hero himself, in times of old, would have narrated, *viva voce*, to auditors "who live at home at ease." Here we have "an En-

gineer's Life in the Trenches," and many little anecdotes of interest in regard to the momentous siege of Sebastopol, or rather of the Russian armies. Some idea of the office of a surveyor under the pressure of cannon-shot may thus be obtained. The author is Major Whitworth Porter, of the Royal Engineers.——"The manufacture of a pin, accompanied by specimens, showing the progress of the manufacture, from the rough metal to the finished article," is the second of those "Illustrations of the Useful Arts," by Mr. Charles Tomlinson, in course of publication, by Messrs. Myers and Co. of Leadenhall-street, the first of which related to the manufacture of a needle. These are exceedingly interesting and instructive little treatises, not the least interesting thing connected with them being the specimens illustrative of the manufacture, affixed to a card, and enclosed with each treatise in a cloth and pasteboard envelope. The present specimens consist of little slips of copper and zinc, the elements of brass, and of brass itself; then of brass wire, soft, rough drawn, fine drawn, &c. and hard and elastic; then straightened and pointed, separated for shafts, headed, silvered, blacked, blued, and fully finished, with long "stobs" for blankets, and Lilliputians for ribbons. The next will trace a piece of calico from the pod to the finished piece.——"A Practical Swiss Guide," by "An Englishman in Switzerland," has been issued by Messrs. Longman and Co. It is brief and handy, and though there is not much descriptive matter in regard to buildings, the volume will be very useful to every tourist in Switzerland, which it penetrates by various routes, and in all directions, giving a clear and apparently correct index, as it goes on, to the more notable features of each locality, with very useful railway tables of the leading routes through France, Belgium, the Rhine, &c.

Miscellanea.

THE CRYSTAL PALACE.—The picture-gallery has been opened, and promises to form a very interesting additional feature. It is not yet, however, in a complete state. The concerts are most successful; the singers were never heard to greater advantage, but to obtain this result the general effect of the building is much interfered with. Those who love good music should not lose the opportunity here afforded them. On Thursday, the 18th, the great waters will be completed, and made to play. We shall have something to say about them.

THE PARIS AGRICULTURAL SHOW.—The taste which has been exhibited in the arrangement of the cattle show in Paris conveys something of a reproach to the managers of our cattle show. "Grassplats, with their velvet verdure, graceful flower-beds, shrubs, fountains, groups of statuary,—all, in fine, that could refresh the sight and shed a charm over the whole place, has been got together. Standing in the gallery, one might fancy one was looking over some fair valley, rich in verdure and fragrant in flowers, while the singing of birds, from aviaries half concealed amid the trees and shrubs, the gushing of the cool waters as they flash in the stray sunbeam that shoots down through the crystal roof, and the occasional lowing of the cattle, complete the illusion." Never was it imagined by those who year after year have contented themselves with the doings in Baker-street, that a cattle show could be made so interesting. The French building was, nevertheless, ill adapted for the purpose, and we are told that several animals have died.

THE SMOKE NUISANCE.—The Smoke Nuisance Abatement Act is to be amended, by including in its provisions glass works and potteries.

ST. ALBAN'S BRANCH RAILWAY TO WATFORD.—It is said that there were nineteen tenders for the construction of this line, the highest being 30,000*l.* and the lowest 28,000*l.* It is to be a single line, and the contractor whose tender was accepted is Mr. Richard Goodison, of Lewisham, Kent.

ART, SCIENCE, AND LITERATURE, IN THE CITY. The Lord Mayor, Salomons, entertained about 200 visitors at the Mansion House, on Wednesday, the 11th, all connected with art, science, or literature. The Royal Society, responded to by Sir Benjamin Brodie; the Civil Engineers, coupled with the names of Mr. Stephenson, Mr. Brunel, and Mr. Gregory; the Architects of England, with the names of Professor Cockerell, Sir C. Barry, and Mr. Tite, M.P.; the Sculptors, with the names of Mr. McDowell and Mr. Bailey; and the Press, responded to by Mr. John Forster, were amongst the toasts. The dinner was exceedingly well managed, and passed off most satisfactorily.

THE ARCHITECTURAL EXHIBITION.—We would make it known that the Exhibition will be opened to the public in the Suffolk-street Galleries on the 17th day of December next, and will remain open till nearly the end of February. All works must be delivered at the Galleries on the 1st or 2nd of December; and none will be received later. Two rooms, as before, will be retained for models, carvings, decorations, specimens of manufactures, and inventions connected with building, and as the committee have ascertained beyond a doubt that most of those who have been exhibitors on former occasions have reaped a substantial advantage—have found it most profitable, and the very best mode of making their productions known, not only to the architects and builders of London, but to those also of the country at large,—they will on future occasions expect all to pay a sum according to the space they occupy.

THE HALF HOLIDAY.—Sir,—The men in the employ of Mr. Glenton, of Blackheath, commenced on Saturday, May 31st, leaving off at twelve o'clock, thus obtaining a good long half-day for recreation. The way we manage it is thus:—The men work half an hour longer five evenings per week, making two and a half hours; the master gives two and a half hours; and they are paid and off the premises by twelve o'clock. We average from 100 to 120 men the year round. All work well; and we find the men study us more by giving them a little privilege as we do.—J. H.

WATERLOO-BRIDGE COMPANY.—At the half-yearly assembly of proprietors held on 5th inst. at the Freemasons' Tavern, it was resolved to contribute the sum of 100 guineas towards a subscription for the purchase of a piece of plate to be presented to Mr. George Powell, their surveyor and chief clerk for the last fifty years. The directors and proprietors are also to subscribe individually towards the same object.

THE IRON TRADE.—Prices have a decided downward tendency. Welsh bars have fallen 10s. per ton in Staffordshire, and a farther decline in bars is talked of. The Thames-street houses have also of late been selling at reduced prices, and at Liverpool also there has been a decline. The American trade has been seriously damaged, as was to be expected, by the past conduct of speculators in this trade. There is a great falling off in orders for America, which are said to have "disappointed every one's expectations;" and this is considered as all "the more strange" that imports into American ports have of late been very greatly on the increase. In Scotland thirty-five furnaces have been out of blast in consequence of the colliers' strike, so that prices have there been better sustained in the meantime. The Belgian Legislature is following the British example of free trade, having reduced the import duty on pig iron from 2*l.* 6s. 6d. down to 18s. 7d. per ton, a reduction of 60*l.* per cent.; and the Representative Chamber, by a large majority, have even "resolved," in the face of the Government, that the iron and coal duties should be entirely abolished.

TAUNTON SCHOOL OF ART.—The inauguration of the Taunton School of Art took place on Monday in last week, in the Public-hall, Bath-place, Taunton, the building set apart for the purposes of the school. The meeting, which was convened by public notice, and presided over by the bailiffs, was numerously attended, especially by the artizan class, who seemed desirous of examining the casts, models, and other apparatus of the school, which were now for the first time publicly examined. Mr. Jones, the honorary secretary, explained the objects and advantages of the school; and Mr. W. F. Elliot delivered an able address on art, which is pretty fully reported in the *Taunton Courier* of 4th inst. together with an address by Mr. J. B. Williamson, the head master, and other proceedings.

GAS.—The price of gas at Ripley has been reduced from 6s. 8d. per 1,000 cubic feet to 5s. 10d. for the current year, after which it is to be further reduced to 5s. in accordance with a request made to the proprietor of the local gas-works, Mr. Crossley, by the gas-consumers of the place.

TENDERS FOR SEWERS.—The following is a list of the tenders for new sewers to be constructed in the parish of Twickenham, according to plans, sections, and specifications, prepared for the board of surveyors of that parish, by Mr. C. Eley, jun.:—

Ellis	£950	0	0
Murray	630	0	0
Baker	620	0	0
Dethick	550	0	0
Adamson	537	0	0
Pound	535	0	0
Yeoman	522	0	0
Gardener	479	0	0
Rowe	475	0	0
Boulter	452	10	0
Thurst	442	0	0
Pope (accepted)	430	0	0
Rogers	419	10	0

ASPHALTE FLOORS.—We observe in your journal of the 7th inst. a communication signed "G. D. Pocklington," stating that asphalte floors "retain the moisture, and consequently destroy the grain." We can assure your readers that if asphalte floors are laid properly, such is not the case. Our maltstores, which are built in a low situation, we laid with asphalte floors several years ago, and upon these we have regularly stored our malt without injury to its condition, or its becoming "slack." To effect this, all persons conversant with malt know how essential dryness is. Our experience in using asphalte floors is, that with proper care, asphalte forms the cheapest, driest, and most durable flooring yet known.

T. PRENTICE AND CO.

TENDERS

For the Baptist Chapel, Newport, Monmouthshire. Mr. R. G. Thomas, architect:—

William Cock, Newport	£2,253	0	0
William Williams, Newport	2,139	0	0
James and Roberts	2,131	0	0
Thomas Richards	2,014	0	0
David Prosser	1,975	0	0
L. B. Moore	1,973	0	0
H. P. Bolt (accepted)	1,902	0	0

TO CORRESPONDENTS.

"*Varnish.*"—Can any of your readers inform me what description of varnish is the most transparent, and at the same time durable and suitable for polishing, and where it can be obtained?—A SUBSCRIBER.

"*Stains.*"—A working man wishes to know "of any cheap substance which will remove the marks of mahogany and rosewood stains from the hands, as soap or soda does not answer the purpose."

"R. W."—"T. R."—"J. S." (other builders think very differently).—"T. P."—"Mr. M. (under our mark).—"Mr. F." (ditto).—"The Mason" (ditto).—"F. D."—"Mr. N."—"M. B. and Co."—"O. H."—"W. H." (the water could be usefully applied: consult a practical engineer).—"Z." (will appear).—"J. W. B."—"D. J."—"A Householder."—"H. and R. H."—"Mr. R."—"T. P. Jun."—"G. L. F." (it depends on the wording of the contract. We cannot attempt to advise in private disputes).—"Frank" (declined with thanks).—"R. C."—"W. and B."—"T. G."—"C. F. H."—"J. J. M."—"W. V. P."—"C. C. N."—"W. F. H."—"E. C."—"Sir W. C."—"J. W."—"W. K."—"A. P."—"R. S."—"One of the First Ten."—"Mr. B."—"J. N." (we shall be glad to receive the particulars offered).—"W. S."—"C. G." (next week).—"E. I. B."—"C. F."—"A. J. B. H."—"C. and A. G."—"Nemo" (says the "shaft" at Bethlehem Hospital, complained of, has disappeared, and wants to know who pays for putting up and taking down).—"5,000 to 1, Brompton."—"T. M." (what was the nature of the building tendered for?)—"A. L." (the specimen may be had on application)—"Perseverantia" (apply to the artists' colourmen).

"*Books and Addresses.*"—We are forced to decline pointing out books or finding addresses.

ADVERTISEMENTS.

APPRENTICE.—A first-rate WRITER has a VACANCY for an APPRENTICE, either in or out-door. A moderate premium required.—Apply to D. O. HASWELL, Sign and Glass Writer, 49, Greek-street, Soho-square.

BOROUGH of DORCHESTER, DORSET. CLERK of WORKS WANTED.—The Town Council of Dorchester require the services of a competent CLERK, to take charge of the works of sewerage and water supply about to be commenced in their district. It will be necessary for him to have a practical knowledge of well-sinking and boring, the construction and fixing of steam-engines and pumps, and of masonry generally, and the works connected with laying brick and pipe sewers and water-pipes. Candidates are requested to apply for further information to Mr. A. WHITEHEAD, Engineer to the Council, 4, Dix-field, Exeter, and to state the salary they require, before the 1st of JULY next.

Dorchester, June 9, 1856. G. SYMONDS, Town Clerk.

BUILDERS' CLERKS.—WANTED, a well-educated, respectable YOUNG MAN, acquainted with bookkeeping, in an extensive establishment in London.—Apply by letter, stating age and last occupation, to F. K. Office of "The Builder."

CLERK of WORKS.—WANTED, immediately, an experienced CLERK of WORKS, fully competent to perform all the usual duties.—Address, stating terms and enclosing testimonials, to MORGAN and PHIPSON, Architects, 3, Danes-inn, Strand. No personal application will be attended to.

CLERK of the WORKS for the DUDLEY UNION WORKHOUSE.—WANTED, a thoroughly competent person in the above capacity, and who will devote his whole time and energies to the due performance of his duties. Salary at the rate of 150*l.* per annum. Written applications, with testimonials, to be addressed to Mr. SHORTHOUSE, Clerk to the Guardians of the Dudley Union.—Dudley, 9th June, 1856.

IN a Builder's Office, WANTED a JUNIOR CLERK, who writes a good hand, and is capable of tracing drawings and checking dimensions.—Address, O. P. Office of "The Builder."

NOTICE to MASONS and BRICKLAYERS.—CONSTANT WORK for 200 GOOD HANDS, at 4s. 6d. per day.—Apply to Mr. OWEN LEWIS, Royal Oak, Saint Mary-street, Cardiff.—Cardiff, June 2, 1856.

TO CARPENTERS AND SMITHS.

WANTED IMMEDIATELY, in a Builder's Establishment, a CARPENTER, thoroughly acquainted with his business, and capable of taking the management of a workshop in which a considerable number of hands are employed. Some acquaintance with working from plans and setting out work indispensable. An experienced and steady BLACKSMITH, accustomed to jobbing in a building yard, also required.—Apply by letter, prepaid, to B. H. "Merlin" Office, Newport, Monmouthshire.

TO PARENTS AND GUARDIANS.

WANTED, an active LAD as IN-DOOR APPRENTICE to the MATHEMATICAL DRAWING INSTRUMENT MAKER.—Apply to J. TETTMAR, 18, Robert-street, Jubilee-street, Mile-end-road, London.

TO GENERAL FOREMEN.

WANTED, a thoroughly practical FOREMAN, by a Builder (Carpenter by trade).—Address, by letter, with testimonials, A. B. Office of "The Builder."